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From the Editor

Does Microsoft know I'm writing this? I'm using Word on a Windows 10 PC, so it's a question I'm tempted to ask. You may ask yourself something similar after reading this issue's cover feature (page 50), in which we reveal how Microsoft's new operating system spies on your every move. It doesn't just know the obvious stuff - your name, age and so on. It also tracks what you type, targets you with adverts and uploads info from your calendar.

And why is Microsoft doing this? I'll give you a clue: it's one word, five letters long, begins with M, ends in Y, and rhymes with 'funny'.

Given recent cover features, it may seem as if



we have it in for Windows 10. That's not true. We still think it's a very good operating system that provides a richer computing experience than its rivals. It's precisely because we're such big Windows fans that we feel the need to highlight where Microsoft gets it wrong.

Daniel Booth

editor@computeractive.co.uk



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HOW TO USE SNIPCA URLS

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

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NirSoft's 10 best programs
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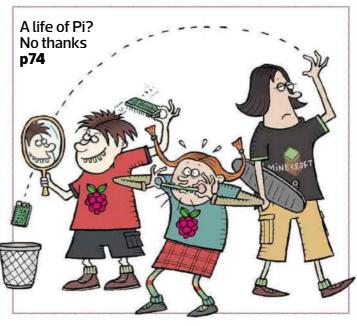
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News

The top stories in the world of technology

Microsoft to download Windows 10 without approval

Microsoft has begun to automatically download Windows 10 on to PCs running Windows 7 and 8. prompting fury among users.

In early February the company changed the update status of Windows 10 from 'optional' to 'recommended'. This means that the new operating system (OS) will be downloaded in the background of any PC that has Windows Update switched on, without the user needing to approve it.

The company outlined its plans to do this in October last year (read the blog post at www.snipca.com/19590), saying: "Our aspiration is for customers to choose Windows, and to love Windows".

Computeractive readers on our Facebook page (www. facebook.com/computeractive) responded with a mixture of dismay and anger. Peter Willetts wrote: "Whatever happened to freedom of choice? Why do Microsoft think they know better than us?"Another reader, David



Ward, slammed the "forced upgrade" as "an unhelpful and pushy business practice".

It's the latest ploy in Microsoft's highly controversial marketing campaign to persuade Windows 7 and 8 users to upgrade. It's likely to be very effective because most people leave Windows Update enabled in order to receive security fixes and new features.

Microsoft itself "strongly discourages" users from disabling Windows Update.

Huge download

The download will take up between 3.5GB and 6GB of storage space on hard drives. Such large files could result in unexpectedly high bills for people with a limited internet download allowance or metered connections.

However, you do have an opportunity to refuse the automatic upgrade. After the files are downloaded you will see a screen asking you to confirm that you want the upgrade. At this point you can choose to stick with your current OS, whether it's 7 or 8. You can also choose to reschedule the Windows 10 upgrade for a more convenient time.

Critics of Microsoft say that many people will be "tricked" into installing Windows 10 because they have become accustomed to clicking 'OK' to begin Windows updates. With this particular upgrade, they may not realise that they are agreeing to a whole new operating system.

Microsoft says this won't happen because users will be "clearly prompted" to make a decision, thereby minimising any confusion.

There is a safety net for

COMMENT

When does persuasion become coercion? Microsoft's latest upgrade trap is dangerously close to the latter. We've never had a problem with the company promoting the new OS. Microsoft should be proud that Windows 10 revives the best of 7 and removes the worst of 8. But the more it strong-arms its users into upgrading, the more it resembles the behaviour of gangster heavies. Could Microsoft's next tactic be an email beginning: "Nice computer you have here would be an awful shame if something happened to it"?

users who do accidentally upgrade. Microsoft gives you 31 days to revert to your previous OS.

Windows 10 overtakes **XP and 8.1**

Recent figures suggest that Microsoft's aggressive marketing of Windows 10 is working. Since December 2015 the proportion of PCs running it has risen to almost 12 per cent, overtaking XP and 8.1.

But Windows 7 remains far ahead on 52 per cent. Microsoft's target is to install Windows 10 on a billion devices. To hit that, it needs to persuade millions of Windows 7 users to upgrade.

HOW TO AVOID THE UPGRADE

You can stop Windows 10 being automatically downloaded in Windows 7 and 8 by knowing which box to untick in Windows Update. Click the Start menu, Control Panel, 'System and Security', then

Windows Update. Click 'Change settings' on the left, then below 'Recommended updates' untick the box 'Give me recommended updates...' (see screenshot). Click OK. You'll still receive security updates.







Good riddance to Java! Unsafe plug-in to be ditched

One of the most notoriously unsafe browser tools - the Java plug-in - is being phased out by its maker Oracle.

Software developers have been using Java for the past 20 years to allow programs to run in browsers. But it has recently become increasingly riddled with security flaws. and many modern browsers are now incompatible with it.

Microsoft's new browser Edge has never supported Java, while Google removed support for it in Chrome in September last year. Mozilla, which makes Firefox, said it will follow suit later this year.

Only Internet Explorer, Opera and Apple's browser Safari now support plug-ins.

Java's demise will come as a relief to PC users fed up with having to regularly update it to fix vulnerabilities. It was



also hated for coming with the Ask toolbar, which installed itself on to PCs along with the plug-in (read more on the Java site: www.snipca.com/19563). You had to remember to opt out of installing the toolbar every time you updated Java.

Most security experts weren't surprised by Oracle's decision. Respected blogger Graham Cluley (www. grahamcluley.com) said that Java's days "have been

numbered for some time".

He added that for most of Java's life "hackers have been exploiting vulnerabilities in the plug-in to infect computers".

Oracle said that it will "deprecate" Java. This means that before removing it completely Oracle will stop encouraging users to install it. But it didn't say when support for Java would end completely.

Other plug-ins - such as Adobe Flash and Microsoft Silverlight - are also becoming obsolete as browser developers look to alternative technologies that don't need to be installed, such as HTML5.

If you have Java installed on your PC, you should consider removing it using Oracle's instructions at www.snipca. com/19564.

IN BRIEF

FIREFOX FIXES 12 SECURITY FLAWS

Mozilla has updated its Firefox browser to fix 12 security vulnerabilities, three of which were rated 'critical'. Hackers could have used some of the flaws to steal personal information from users as they browsed the web. The new version of Firefox, number 44, should have updated automatically on your PC. To check, click the top-right Menu button (three horizontal lines), the question mark at the bottom, then 'About Firefox'. Mozilla illustrates these instructions at www.snipca.com/19541.

RANSOMWARE ATTACKS LINCS COUNCIL WEBSITE

Lincolnshire County Council's website was down for five days in late January following a ransomware attack on its computer system. It was initially reported that hackers were demanding a £1m ransom to unlock data on the website, but the council later said the figure was €500 (around £350). After getting its system working again, the council said that the ransom hadn't been paid, and that no data had been stolen.

GOOGLE TO SHOW ANTI-ISIS RESULTS

Google is to start showing anti-extremist results when people search for material relating to terrorist groups. such as ISIS. It wants to show "counter narratives" that help prevent the radicalisation of potential jihadists. They will appear as Google AdWords, the sponsored links that appear at the top of search result. It's not yet clear which search terms will prompt these results. A similar system is already used for searches relating to suicide, which show links to the Samaritans.

TalkTalk phone scam: Indian call-centre workers arrested

Indian police have arrested three men at a TalkTalk call centre in Kolkata (Calcutta) in connection with scam calls to UK customers.

They are suspected of having stolen customer data in order to con victims out of thousands of pounds.

TalkTalk said it alerted Indian authorities following a review of its data security.

The arrested men are employed by Wipro, an Indian IT services company that TalkTalk pays to run its call centres. As a result of the arrests, TalkTalk says it is "reviewing its relationship" with Wipro.

The company was quick to reassure worried customers,



saying in a statement that it remains "determined to identify and deal effectively with these issues and we will continue to devote significant resource to keeping our customers' data safe".

TalkTalk said there was no evidence that the arrests were related to the well-publicised hack last October, in which the details of 157,000 customers were stolen.

The company added that

since the attack it has conducted "a forensic review to ensure that all aspects of our security are as robust as possible - including that of our suppliers".

Over 101,000 customers left TalkTalk as a result of the hack, the company recently announced. This figure was much less than expected, amounting to just three per cent of its customers, though it cost the company £60m.

Sky and BT appeared to have benefitted most, adding 144,000 and 130,000 customers respectively in the final three months of 2015.

News

IN BRIEF

AMAZON RELEASES NEW KINDLE SOFTWARE

Amazon is updating several models of its Kindle e-reader with new software. The most significant feature is a homepage that displays books you've recently read books and suggests other titles based on your tastes. The update - due before the end of February - will automatically be applied to the Kindle Voyage, the 2013 and 2015 Paperwhite, and the 2014 standard Kindle. Read Amazon's announcement at www.snipca.com/19574.

NOW FISHER PRICE TOYS CAN BE HACKED

Fisher Price has fixed a security flaw in its 'smart' teddy bears that could have allowed hackers to access the account of children who owned them. The vulnerability was exposed by security company Rapid7, whose blog (www.snipca. com/19577) claimed that after stealing personal details an attacker could have launched a "malicious campaign" against a child. The toys can be controlled and updated through a mobile app.

Tomorrow's World

Would you like your greatgreat-great-grandchildren to relive events of your life? That's the promise of 'electronic immortality', in which your experiences are uploaded online for future generations. Dr lan Pearson says it may be possible by 2050. Read more of his predictions on the website for The Big Bang Fair (www. snipca.com/19586), an exhibition for young scientists.

Don't click that button! Google to warn you about dodgy downloads

Google has declared war on one of the most devious tricks used by cybercriminals fake download buttons that steal your personal details or install junk on vour PC.

As part of its 'Safe Browsing' initative (www.snipca.com/ 19576), the company will now warn Chrome and Firefox users when they are about to visit a site that it suspects contains a "deceptive" button





or advert. A red screen will appear urging you not to visit the site (see screenshot below left).

Criminals often masquerade as legitimate companies to con people into clicking links and installing software. Google will fight this by warning you of anything that tries "to act, or look and feel, like a trusted entity".

Google gave a couple of examples on the blog post announcing the news (www. snipca.com/19575). In one advert, hackers use a fake "error message" (pictured left) to dupe people into thinking they need to update their media player.

Google's 'Safe Browsing' protection is turned on by default in Chrome and Firefox. To check in Chrome, click the menu button (three horizontal lines), Settings, then 'Show advanced settings' at the bottom. On the next page, under the Privacy section, check that 'Protect you and your device from dangerous sites' is ticked.

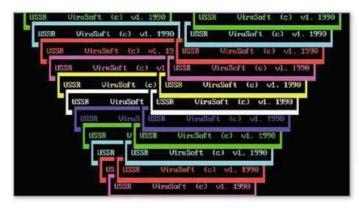
In Firefox, click the menu button, then the Options cog. Click Security in the left-hand column, then check all the boxes under General are ticked.

Malware Museum revives old PC viruses

The colourful history of computer viruses has been captured with the launch of the Malware Museum (www. snipca.com/19587), an online collection of vintage PC infections. It shows what happened to PCs running MS-DOS - Microsoft's pre-Windows operating system when they were attacked.

The results were as imaginative as they were devastating. Many viruses would show kaleidoscopic images, gaudy animations or blocky graphics that bring to mind computer games from the 1980s. In one virus the words on your PC would be 'eaten' by a centipede.

The virus pictured, called HYMN.COM, displayed words in the shape of a 'V' on your PC screen. Believed to have originated in Russia, it was identified in 1990 and damaged PCs so severely that



they couldn't be booted from the hard drive or floppy disk.

To relive the full impact of the malware, click the topright 'fullscreen view' button in the museum. It's completely safe because all destructive elements from the malware have been removed. The effect is like turning a virus into a screensaver.

The Malware Museum has been created by Internet Archive, a free digital library that aims to provide "universal access to all knowledge". It was compiled by Mikko Hypponen, Chief Research Officer for Finnish antivirus company F-Secure.

Hypponen said his favourite virus was Casino, which forced the victim to play a game to unlock files. It typified the mischievous nature of old viruses which were, he said. mostly made by "teenage boys who were bored". By contrast most of today's hacks are linked to organised crime.



Is BT treating the British public like fools?

The company was caught mocking a report that criticised its poor broadband service

Of all the skills required to work at BT, you'd think knowing how to operate a telephone would rank highly. But two press officers for the company recently committed that most embarrassing of mistakes: leaving a message then carrying on talking, mistakenly thinking that they had hung up.

It may not sound catastrophic, but they were ringing the office of Conservative MP and former party chairman Grant Shapps, who had just published a report that investigated BT's "natural monopoly" on UK broadband.

Assuming nobody would hear, they started to ridicule the pun in the report's title: 'Broadbad' (pictured below). "Oh, that's clever," said one of the press officers sarcastically, "that's hilarious".

Shapps wasn't pleased. He posted the recording online (www.snipca.com/19523), calling the press officers' comments "contemptuous and dismissive" and saying that they "appeared simply not to care" about the issue.

BT customers who listen to



the comments might be inclined to agree. Many will feel outraged by the press officers' attitude, seeing it as symptomatic of the company's perceived arrogance.

The report itself is damning about Britain's broadband infrastructure, blaming the lack of competition in the industry. Published by the British Infrastructure Group and backed by 121 MPs – both Labour and Conservative – it called for BT to be split from its Openreach division, which maintains the cables that

comprise UK's broadband network. All major internet service providers (ISPs), except Virgin Media, pay Openreach to carry their service.

Critics of this arrangement argue that BT has no incentive to improve its broadband

THE FACTS

- BT press officers were caught mocking a report from MPs criticising the company's broadband
- 121 MPs backed a study that claims 5.7 million people in the UK suffer "dire" speeds
- They want BT to split from its Openreach division, which runs the UK's broadband network

infrastructure because rival ISPs, such as Sky and TalkTalk, would benefit. It has left 5.7 million Brits with "dire" internet speeds, the report claims, despite BT receiving £1.7bn from the Government to fund the delivery of super-fast broadband.

The report (which can be read at www.snipca. com/19528) claims that "Openreach makes vast profits and finds little reason to invest in the network, install new lines or even fix faults in a

properly timely manner".

It says that Britain "deserves better", and should be "leading the world on digital investment and innovation". It accuses BT of being "a company that clings to outdated copper technology with no long-term plan for the future".

Most of those stuck on slow speeds live in the countryside. Shapps said that "BT seems content to ignore forgotten rural communities".

BT's official statement wasn't as disdainful as its press officers were, but it did call the report "misleading and ill-judged". The company suggested that if its Openreach infrastructure division became independent it would struggle to invest as much as it does currently. It also pointed out that other reports, such as from UK telecoms watchdog Ofcom, said that the UK's broadband network is one of the best in Europe.

The Government's digital economy minister, Ed Vaizey, also questioned the wisdom of dividing BT and Openreach. He told the *Financial Times* that he is "a sceptic" of the proposals, which are currently being considered by Ofcom as part of its Strategic Review of Digital Communications.

Vaizey recently said that
Ofcom is due to make its
decision by the end of
February. BT's press officers
won't have harmed the
company's case, but its public
reputation has taken another
battering. Customers can
rightly expect employees of
such a prestigious company
to behave better.



A new study into broadband investment and the role of BT and Openreac

A British Infrastructure Group (BIG) Report by The Rt. Hon Grant Shapps MP Published: 25th January 2016

BT's press officers didn't appear to take the 'Broadbad' report seriously

Letters 2

Tell us what's on your mind

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



Windows 10 is incredible why wouldn't you want it?

I'm amazed by some letters from readers, and wonder why they use something so modern as a computer when their minds are completely closed to progress. Why would any sane person not want a free advance in computing - and what an incredible advance Windows 10 proves to be.

I've upgraded my desktop PC and four laptops to Windows 10. The upgrades were accomplished faultlessly and without any great need for computer know-how. Two of the machines ran Windows 8 - they belong to my young grandchildren and they don't seem to be having any trouble with the new operating system.

I have never found any update simpler, and the improvement in reliability and performance has been noticeable on all the computers. I'm convinced Windows 10 will be one of the most loved operating systems once people have had time to use it for longer.

Derek Peters

Use Windows 10? Vista is still good enough for me

Can I be the only one who is fed up with people pointing fingers of derision at people who use a previous version of Windows? It gets more annoying every week, particularly when there is a new kid on the block like Windows 10.

Whenever you buy a new PC you always get a nasty feeling that a couple of years down the line a new operating system will come along, at which point the manufacturer and other companies will say that what you're using is out of date. They say they won't support it anymore, pointing the finger at you as though it was your fault for buying it in the first place.

As well as a laptop that runs Windows 10, I'm still using a Vista desktop computer that is perfectly adequate for my needs. So everybody can go ahead and have a good laugh if they want, but it's only a matter of time before Windows 10 is derided as being wholly inadequate.

Dave Quinton



XP diehards are 'worse than dinosaurs'

Personally, I think it's generous to call Windows XP users 'dinosaurs'. I would perhaps go back further in time, and say that XP is like the primordial swamp, and its users like single-celled organisms. I'm sorry if this leads to a torrent of abuse from XP devotees, but there have been four operating systems since XP launched, plus countless updates.

I would understand it if XP was like a vintage car, and users had spent years renovating it. But XP users don't continue to use it because it's a design classic from a bygone age. They do so because they simply can't be bothered to learn a new operating system.

Robert Mason

Windows 10: on the Money

I was surprised to read that Geoff Griffiths is unable to use Microsoft Money Plus in Windows 10 (Letters, Issue 468). I have now installed Windows 10 on four PCs and I have MS Money working perfectly on all of them. On two machines I have the original MS Money 2005, and the other two are running

Money Plus. One of the machines was already running Money 2005 when I upgraded from Windows 7 to Windows 10, but on the other three I have installed Money after upgrading.

Alan J Brown

Friends Reunited

Shame that people left Friends Reunited for Facebook

The death of Friends

Reunited (News, Issue 468) made me sad. I used the site quite a bit years ago to track down old school friends from the 1950s, and we're still in touch. To me, the website represented a more civilised, less self-obsessed type of internet, an era BF (Before Facebook). In these BF years the internet was a pleasant place, an escape from the real world, somewhere you'd go for fun, curiosity, random discoveries and friendly conversation. Now it's populated by preening morons taking selfies with preening moronic celebrities.

Hospital Wi-Fi is 'a lifeline' for patients

I was rather surprised to read Ruth Stack's views on free Wi-Fi in hospitals ('Doctors will take selfies in surgery', Issue 467). My husband was recently seriously ill in a hospital where there was no phone signal. Wi-Fi enabled him to keep in touch with us at home and also download the daily paper to

Having been rushed to hospital myself a year ago, my phone was my lifeline. It helped me keep in touch with friends and family via Wi-Fi or 3G. It also enabled me to know what was going on in the world and also to look up online some of the treatment that I was receiving, allowing me to



understand it more fully. Taking a selfie could not have been further from my mind. And whoever said, like Ruth did, that hospitals had to be "solemn places"? Being cheerful and happy gets you well quicker!

Linda Hawkins

I know Friends Reunited was blamed for wrecking several marriages, as people tracked down old loves online. But for my peer group it was used in a more innocent way. We just wanted to catch up and chat about the old days. We all swapped email addresses and have stayed in touch. None of us moved on to Facebook. It's just a shame that millions of other people did.

Howard Atkinson

I have a lot to thank Friends Reunited for. I lost touch with my first love when she moved house aged 16. A lifetime and one divorce later I spotted her on the site, got in touch, and, well, reader, I married her! I doubt I'd have had such success wading through the narcissists on Facebook and Twitter.

Ted Baldwin

There were a lot of crocodile tears shed for Friends Reunited when it was announced that it was closed. If everyone was so sad to see its demise, why had millions of people switched to Facebook years ago? People forget how basic Friends Reunited was. Facebook isn't perfect, and it does attract some idiots, but it's simply light years ahead of what came before.

Bryan Robertson

Google's political clout will only get stronger

7 David Campbell's fury about Google telling the Government how to run the country (Letters, Issue 468) made me chuckle. Hate to say this David, but Google's influence over political affairs is only going to grow stronger. Just think how cockahoop Google must feel that it had to pay a measly £130m to the UK taxman. And we're supposed to feel grateful that it coughed up at all!

I don't expect our authorities to fight back any time soon. They're too easily dazzled by companies like Google and Apple because they are seen as 'cool'. It's a shame the steel industry doesn't carry the same prestige.

Judith Passmore

The Conservatives may have won the last election, but they still need to be held to account. Big companies can play a part in doing that. Corporations obviously have their own vested interests, which involve making as much money as

STAR LETTER

Why are PC sales falling? Because they last longer

Your 'Question of the Fortnight' in Issue 468 (see image) asked why PC sales are plummeting. It seems that experts are blaming phones and tablets, but can I offer an alternative theory? Could it actually be that computers are lasting longer these days, and need to be replaced less often?

In this analysis, rather than being on the decline, computers are actually in good health. I'm still using the same Windows 7 Lenovo PC I bought five years ago. It may be a wee bit slower than when it was new, but it's still fast enough for most things I do. The same goes for the chunky Dell XP PC I use for offline tasks.

As a result I haven't bought a PC for over five years, but that doesn't mean



I'm less interested in computing. I still use my machines every day. I still think they're better than any swanky phone or tablet. In fact, I don't consider my tablet (a Galaxy Tab) to be a computing device at all.

It's more like a TV alternative, because all I do on it is watch videos and, on occasions, play

games and do crosswords. Tablets will never replace computers because they aren't built for heavy-duty tasks. I once tried to fill in a spreadsheet on a tablet, and gave up after 20 frustrating minutes.

So, in conclusion: computers are still great, tablets are good but overrated, and so-called experts don't know what they're talking about.

Alistair McEwan

The Star Letter writer wins a Computeractive mug!

possible, while paying as little tax on those earnings as possible. But that doesn't mean the companies are wrong about everything. On the debate over encryption, for example, I'm tempted to agree with Google and Apple. The Government is getting too much power to intercept our communications. I hope technology companies can continue to wield more influence.

Adrian Sutton

Indian call centres are 'patient and helpful'

Can I defend the reputation of Indian call centres, which have taken a bit of a kicking in these pages? While I accept that sometimes the accent is hard to follow, I have always found the staff patient, helpful and understanding - often more so than their counterparts in the UK. Yes, it's good news that BT is moving its call centre back to Britain, but it doesn't automatically mean we'll get better service than before.

Richard Langham

Ban people who use stupid passwords

Z Every issue of Computeractive gives me at least one 'If I ruled the world...' fantasy. In Issue 468 it



was reading the news that '123456' was the most popular password in 2015. Now, if I ruled the world (and don't rule out that, one day, I will) I would ban anyone who ever used that password from buying a computer. They have forfeited their right to enjoy computers and the internet because of their stupidity. Tough? Certainly. Hard to enforce? Almost definitely. But the right thing to do? Absolutely.

Len Longford

CA says We shudder to think at how Mr Longford would treat Lenovo, were he to take over the world - see Protect Your Tech, page 14.

Consumeractive

Is it worth pursuing a claim for a laptop that's five years old?

My HP dv7-4015sa laptop, which I bought from John Lewis in November 2010 for £549, has developed a black screen and the local repair shop said it's an inherent fault with the processor. John Lewis told me I had to contact HP because it's an old fault. Is this correct?

Ray Taylor

No. What matters isn't whether a fault is old, but exactly how old it is. For inherent faults, the Sale of Goods Act says that retailers have to repair or replace the item within six years of purchase (five in Scotland). But is the case worth pursuing? Ray will need a report from his local repair shop to prove the fault is inherent, which will cost him £49. Ray is entitled to a pro rata refund, but this will amount to only £60 because he's used the laptop for over five years.

That said, if John Lewis accepts the repair shop's report it will have to refund Ray the £49 fee. If it rejects the report, Ray is left with the small claims court, which costs £30. We've contacted John Lewis to see what it plans to do, pointing out there is a known problem with some of the processors ONGOING used in this laptop.

Who should refund me -Wowcher or the retailer?

Just before Christmas there was a Wowcher offer for a Chuwi V90 Android tablet from a company called Chimp Electronics (www.chimpelectronics. com). I paid £54 for the tablet plus £9.99 postage. However, the tablet isn't 'new' (as described), so I'm sure it's refurbished. Also, I'm pretty certain it's not HD as was claimed, and it's rooted when it shouldn't be. Surely I'm entitled to a refund, but from whom? Chimp or Wowcher?

Darla Wilson

Darla is right - she is entitled to a refund. It sounds like her tablet was misleadingly described. But we understand her confusion about who to approach because she bought the tablet from Chimp using a voucher from the 'group-buying' website Wowcher. In cases like these legal responsibility is shared between the voucher site (Wowcher) and the retailer (Chimp). Which company you contact depends on where you are during the purchase process. Let us explain.

If you want to cancel a voucher before you redeem it, the group-buying website must refund you. But after you've redeemed the voucher and



received the goods the responsibility for providing a refund or repair shifts to the retailer. Within the first 14 days of receiving the goods you can reject them for any reason under the Consumer Contract Regulations. If like Darla you believe the goods aren't fit for purpose, aren't as described, or are inherently faulty, you have six months to claim a full refund, although you can also request a repair or replacement.

Although in Darla's case Wowcher is no longer responsible, it told us that it will investigate her claim against Chimp because it is "always happy to assist a mutual customer in any way we can". We hope Wowcher can put pressure on Chimp to either refund her, or provide an unrooted replacement that is as described.

How long should a refurbished item last?

In May last year, an assistant at an Apple store said my iPhone 5 had a blown motherboard (our image shows a healthy one). Because the warranty had run out, I had to pay £199 for a refurbished replacement. This has now failed after just eight months, and the battery won't charge. Apple tested the phone, concluded there was nothing wrong with it and rejected my claim, saying that the new warranty is valid for only 90 days. Is this the case?

John Chisem

It may be correct that Apple's warranty lasts only 90 days, but it's also irrelevant. What counts is that John is still covered by the Sale of Goods Act and is therefore entitled to a refund if the phone is broken. But Apple maintains it is working fine. We told John to go back to the Apple store to ask for more tests.

John's case also raises the issue of how long refurbished items should last. This isn't set by law, though it is accepted that they won't survive as long as new



products. Even so, eight months for a refurbished iPhone is deeply unsatisfactory. We told Apple this in the hope of nudging the company toward refunding John.



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.

5LRHut

We stand up for your legal rights

Can a retailer change the length of a warranty?

I recently bought a Panasonic Lumix FZ 200 camera from SLRHut (http://slrhut.co.uk)

that was advertised with a two-year warranty. But SLRHut has now sent me an email saying the warranty is for one year only. Isn't this illegal?

William Morrow

Only if the retailer is trying to con you, and that can be very hard to prove. In most cases like this, the mistake is likely to be a genuine error rather than an attempt to deceive.

However, you can claim a refund under the Unfair Trading Regulations if the warranty was the pivotal factor in your purchasing decision. These give you 90 days to return an item for a refund if you

think the terms of purchase weren't fair. It doesn't matter whether the item is faulty or not, nor whether the retailer was trying to scam you or simply made a mistake. William needs to decide how important the warranty is. If he is deeply unhappy about it, he should contact SLRHut asking for a refund under Unfair Trading Regulations. Read more about these rules on Which?'s website: www. snipca.com/19493.

We've seen a sharp rise in the number of complaints about warranties that turn out to be shorter than advertised. We're not sure if companies are being cynical or careless, but it's a worrying trend. One way to boost your legal chances is to take a

screenshot of the website offering the warranty. Make sure you attach it if you

email us with a complaint. In the meantime, we'll talk to Trading Standards to get its views on misleading warranties.

CASE UPDATE



Silence from Acer on broken laptop

We've been frustrated in our attempt to help reader Jan Mclean, who received a faulty Acer laptop as a

competition prize (see Issue 465). Jan explained that the Aspire E keeps randomly switching itself off, and has now been repaired three times by Syn-Star (http:// syn-pc.co.uk), the shop that supplied it.

The complicating factor is that because Jan didn't buy the laptop, she doesn't have a contract with any of the companies involved - Acer, Syn-Star or Breeze FM (the radio station that ran the competition). Syn-Star has provided good service in repairing the laptop, but three failed attempts suggest the computer is inherently faulty. If so, only Acer can help. While the company isn't legally responsible, we thought it might replace the laptop as a goodwill gesture.

But so far we've heard nothing from Acer. It hasn't responded to any of our emails or phone calls, not even to reject the case. We realise that Jan's complaint may not be top of Acer's list of priorities, but the company's silence is very disappointing.

We hope somebody at Acer reads this and at least acknowledges Jan's situation, because what was a happy experience for her - winning a competition - has turned rather sour. We'll keep pursuing Acer, and send a copy of this article to the company's boss. We hope to have more positive news to report soon.

THIS WILL COME IN USEFUL

Instructions to uninstall programs

Adobe Flash

www.snipca.com/19468

Adobe Reader

www.snipca.com/19474

www.snipca.com/19477

AVG

www.snipca.com/19472

Chrome

www.snipca.com/19461

Dropbox

www.snipca.com/19465

Firefox

www.snipca.com/19462

Google Drive

www.snipca.com/19470

Google Earth

www.snipca.com/19471

Internet Explorer

www.snipca.com/19463

iTunes

www.snipca.com/19466

www.snipca.com/19469

Kaspersky

www.snipca.com/19478

Malwarebytes

www.snipca.com/19476

Norton

www.snipca.com/19475

Office

www.snipca.com/19464

www.snipca.com/19467





Protect Your Tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Lenovo's password gaffe

What happened?

Lenovo, the world's biggest PC manufacturer, was caught using the password '12345678' for one of its programs. Researchers at Core Security discovered that the password, which is notoriously easy to guess, is built into ShareIt (http://shareit.lenovo.com), a

file-sharing tool that comes with many Lenovo computers. It can be used to moves files between computers and Android devices.

The password in question is used for a Wi-Fi hotspot that's created when files are sent from a Windows PC. To make matters worse, it is hard-coded into the system, which means it can't be changed to something more secure.



Core Security spotted several other security flaws in ShareIt, the worst of which transfers files in plain text, allowing hackers to access them. Lenovo issued an update in January to fix the problems, three months after Core said it first informed the company about them.

It's the latest in a series of security scares involving Lenovo computers. In February 2015, the company admitted that its Superfish adware, which was built into its PCs, allowed hackers to

launch attacks. It was forced to release a tool to help people uninstall it (www. snipca.com/19501).

This was followed in December by the emergence of a flaw in the Lenovo Solution Center tool, for which the company issued an update: www. snipca.com/19502.

What should you do?

If you use ShareIt you should update it straight away by following Lenovo's instructions at www.snipca.com/ 19500. To make the Windows version of ShareIt safe you must enable the 'Secure mode' option (see screenshot). In the Android app you need to turn on 'Hotspot Encryption'. We doubt this will be the last flaw exposed in Lenovo's built-in tools. We'll tell you what to do each time one is uncovered.

New tools IE11's new settings www.snipca.com/19503



It's time to give Microsoft some credit. The company has been heavily criticised - not least in Computeractive - for nagging Windows 7 and 8.1 users into upgrading to 10. And its hectoring will surely get worse as the 'free upgrade' deadline approaches (28 July). But at least it isn't leaving Internet Explorer (IE) users high and dry. In January, it updated the ageing browser to let you 'lock' your home page and default search engine, thus preventing adware from changing them.

Yes, it's the sort of feature that should have been in IE anyway. Microsoft had added it to Edge (its replacement for IE) in November. But better late than never. It's a reassuring sign that while Microsoft wants people to move from



IE to Edge, it won't abandon - not yet anyway - those sticking with IE. Click the link above to read Microsoft's instructions on enabling the new settings. It involves tweaking IE's 'Internet options' and 'Manage add-ons' sections (see screenshot).



Will BT suspend my broadband?

In January, I got a call from someone purporting to be from BT. He quoted my BT account number and said that other people were using my broadband without my knowledge. He said that BT would suspend my broadband for 72 hours, and send a technician to my house. I told him it was a scam and hung up. Worryingly, the account number he gave me was correct. BT confirmed to me that the call hadn't come from them, but they didn't seem concerned about this apparent breach of security involving their customer's account details.

Joy Davies



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

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- 1TB Hard Drive
- · Windows 10

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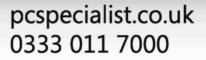
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- 6GB NVIDIA® GTX 980Ti
- 400GB Intel® 750 PCIe SSD
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BACKUP TOOL

CloneApp 1.12.633

www.snipca.com/19357

What you need: Windows 7, 8/8.1 or 10

Carrying out a clean installation of Windows is a guaranteed way to speed up your PC and sort out many underlying problems. The trouble is that it's not exactly the easiest thing to do. The actual installation part is relatively straightforward and recent versions of Windows (8 and 10) include built-in ways to reset the operating system, so you don't even need to dig out your original DVD. The hard bit is restoring all your programs and settings afterwards, so that your PC works like it did before.

CloneApp is a clever tool that can help you with precisely this part of the process. It's designed to back up all the settings for your programs so that you can restore them when you need. CloneApp won't back up the actual programs you'll need to install these yourself. But it will let you copy and restore all the customisations and configurations you've applied to your favourite programs over the years. It's also useful if you're migrating from a new PC or if you own

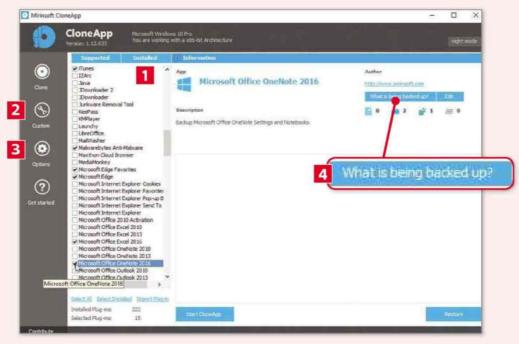


multiple computers and want the same settings on each.

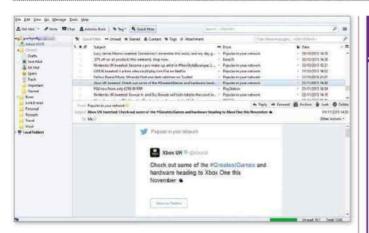
Better still, the program is portable, so you don't even need to install it. Download it from the link above (click the blue Download button in the Data box on the right), then unzip the program to the location of your choice. CloneApp needs administrator rights to work, so right-click the CloneApp.exe file and choose 'Run as Administrator'.

Because it's portable, you can unzip CloneApp to a USB stick and run it from there. You can also back up the settings to the USB, which means restoring them is just a case of plugging the stick into your clean or new PC, running the tool and clicking Restore.

Recently updated for Windows 10, CloneApp can automatically back up settings for more than 150 popular Windows programs and tools. You can add programs to this default list.



- CloneApp lists all the programs and tools it supports - click to tick the ones you want to back up. Click Installed at the top to see the supported programs that are installed on your PC.
- 2 Click Custom to create your own backups of settings for programs and tools that CloneApp doesn't support by default. See www. snipca.com/19358 for more information on how to do this.
- Click Options to change the location where CloneApp stores your backups. If you're reinstalling Windows, for example, you may want to back up your program settings to an external drive first.
- 4 For each program, you'll see a description of which settings are being copied. Click 'What is being backed up?' for more info. Click the Start CloneApp button at the bottom when you're ready.



EMAIL CLIENT

FossaMail 25.2.0

www.fossamail.org

What you need: Windows Vista, 7, 8/8.1 or 10

The Mail app in Windows 8 and 10 isn't a patch on good old Outlook Express - and Windows 7 doesn't even come with an email program. For many years, Thunderbird has been the best free alternative, but Mozilla has no plans to develop it further. In its place, consider FossaMail, which is based on Thunderbird's open-source code, and supports its add-ons and plug-ins, including the excellent Lightning calendar and organiser. Click the 'Download from FOSSHub' button, then select 'Download FossaMail Windows 32-bit (x86)' or 'Download FossaMail Windows 64-bit (x64)' depending on whether your system is 32bit or 64bit. Lightning can be downloaded from the same page.

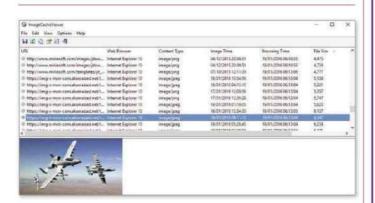


IMAGE FINDER

ImageCacheViewer 1.10

www.snipca.com/19354

What you need: Windows XP, Vista, 7, 8/8.1 or 10

Have you ever wished you'd copied an image from a web page, but now can't remember where you saw it? If so, ImageCacheViewer from NirSoft may help. It scans your browser's cache and displays all the images it finds. Simply click the Save icon to permanently save any. Recently updated to support more browsers (including Internet Explorer, Firefox and Chrome), ImageCacheViewer is a portable program, so you can unzip and run it without the need to install it. It works best when your browser is closed. For more excellent NirSoft programs turn to page 60.

WHAT SHOULD I DOWNLOAD?

We tell you what software to use

How can I restore lost photographs?

Having returned from holiday, I discovered I had somehow lost or accidentally deleted all the photographs I took. I was advised to try a program called Flash File Recovery. Will this work, or is there something better?

Kevin Keeley

We suggest starting with Wise Data Recovery, which has just been updated with improved scanning and Windows 10 support (www.snipca.com/19366,

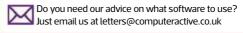
pictured). When you install it, make sure you decline any unwanted tools you're offered. It scans camera memory cards and external drives for lost files as well as your PC.

However, if the files were deleted from your PC, use another computer to download the portable version of the program (www.snipca. com/19367), which you can transfer to (and run from) a USB stick. That way you're not in danger of overwriting potentially recoverable files by



downloading or installing any software on your hard drive.

Launch the program, click Scan, then use the folder structure on the left to browse likely locations, or the Input Keywords box on the right to search for a file type. Tick any files you think might be the ones you lost, then click Recover. The program will prompt you to recover the files to a different storage device, again to prevent overwriting hidden data, so plug in a USB stick. If Wise Data Recovery comes up empty-handed, there are other free tools you can try, including Recuva Free (www.piriform.com/recuva), and Undelete 360 (www.snipca.com/19371). Avoid Flash File Recovery because it's only a trial version and charges £35 to unlock files.





Reviews

New products tested by our experts

PC | £1500 from Currys www.snipca.com/19555

Asus Zen AiO Z240ICGT

One of the best four-figure PCs available

First things first: don't let that eve-watering price put you off. Yes it's very expensive, but this Asus PC is one of the few Windows PCs that's worth spending four figures on. If you're tempted to splash out a similar amount on an Apple iMac - don't. This PC has design touches every bit as good as those you'll find in Apple's computers, and of course it runs Windows 10, a much better operating system than OS X.

It's one of the fastest PCs we've ever tested

Like Apple, Asus has mounted a slender aluminium crescent on a solid one-piece tilting stand. Its characteristic gold-tinged brushed metal is just as upmarket as Apple's silvery anodised finish. The rear panel is clearly modelled on the iMac, with the power socket at the centre, where its cable feeds through a cut-out in the stand.

Asus has also put the Ethernet and headphone ports here, which makes sense for permanently connected network and speaker cables, but not when you're

trying to quickly plug your headphones in. The SD card reader is similarly inaccessible, and the rest of the ports are barely reachable at the bottom left. While the iMac's smooth, flat base makes it easy to turn to access the rear, the Zen AiO's forked prongs are less mobile.

A more serious grievance is the lack of an equivalent to the iMac's access hatch. This lets you cheaply upgrade the memory in the 27in iMac (though not the 21.5in model) to as much as 32GB. Asus provides a sensible 16GB as standard, but there's no option for more, and you can't open the case.

There's better news at the front. The Zen AiO's 24in display - halfway between the iMac's two sizes - covered the whole sRGB colour range with high levels of accuracy in our tests, and its 4K (3840x2160) resolution looked extremely sharp.

It has a touchscreen, so you have the option to reach out to tap a button or scroll a web page. What's more state of the art is the RealSense webcam, which works with Windows' 'Hello' facialrecognition feature to unlock your computer as soon as it sees you. It can also be used along with a few motiontracking apps.

Inside the Zen AiO is one of Intel's newest and fastest processors, the i7-6700T, putting it right alongside the fastest desktop PCs we've tested. It's accompanied by an Nvidia GeForce GTX 960M graphics card, which will cope fine with any 3D game.

This level of performance makes tasks like video editing quite feasible. The only catch is the slow 1TB standard hard drive. With four fast USB 3.0 ports available, and one even faster '10x' USB 3.1 Type-C, you can add quicker external drives if you want. Versions of the Zen AiO are also available with a fast 128GB SSD as well as a hard drive.

We liked the Zen AiO, but it's very expensive. If the 4K display isn't essential, vou can get cheaper configurations (£1,299 with SSD from Very at www. snipca.com/19556). There's also a smaller 21.5in version with a slower i5 processor (£1,000 with SSD from John Lewis at www.snipca.com/19557).

SPECIFICATIONS

2.8GHz Intel Core i7-6700T quad-core processor • 16GB memory • 1TB hard drive • Nvidia GeForce GTX 960M graphics • 23.8in 3840x2160-pixel screen • RealSense camera • 802.11ac Wi-Fi • Bluetooth 4.0 • 4x USB 3.0 ports • 1x USB 3.1 Type-C port • Gigabit Ethernet • 2x HDMI ports • SD card reader • Windows 10 Home • 434x585x190mm (HxWxD) • 7.3kg • One-year warranty www.snipca.com/19558

VERDICT: It's expensive, but the screen is superb, it has a fast processor and it looks fantastic **** **ALTERNATIVE:** HP Pavilion 27-n n170na £999 Performance is in the same league, but the 27in Full HD scr is coarse by comparison





LAPTOP | £255 from Ballicom www.snipca.com/19452

Acer Chromebook 15 C910

The biggest Chromebook yet

Chromebooks use Google's less demanding Chrome OS software, rather than Microsoft's Windows, as a way of getting acceptable performance out of very cheap hardware. And when you're trying to make a laptop for as little money as possible, you don't start with a massive screen. So most models come in an 11 or 13in format. Acer's Chromebook 15 C910 is the exception to the rule, with a full 15.6in display.

The catch is that it doesn't show any more pixels; they're just blown up bigger (there is a version that comes with a 1920x1080-pixel Full HD screen, but it isn't sold in the UK). So although icons, labels and word-processor text look relatively large, they don't look very crisp. Still, we found colour accuracy and contrast weren't terrible, so you could have a go at tasks like photo-editing, using apps such as Pixlr Touch Up, if you had a mind to.

Average screen, modest storage, but it's a smooth performer

Chrome OS is designed for working on the web, though some apps also work offline for when you can't get an internet connection (see the list of apps at www. snipca.com/19454). However, that'll only work if you have room on your Chromebook for apps and documents,

but the C910 comes with only 16GB of storage.

It's powered by an Intel Celeron 3205U dual-core processor. By Windows 10 standards, this might as well be a six-year-old child doing sums with a crayon. But for Chrome OS, it's adequate, and Acer has paired it with a relatively generous 4GB of memory. We found that apps ran smoothly, web pages loaded without the stuttering you'd normally expect on a cheap Windows or Android device, and switching between several tabs didn't test our patience.

There is the option to buy the C910 with an Intel Core i3 processor and 32GB of storage, but the cheapest we found for these specs was £345, which seems a lot. If you're committed to trying the Chrome way – everything in the cloud, nothing on your hard drive – 16GB should be enough. But if you don't need a big screen, consider Dell's Chromebook 11 instead. For a similar price (£221 from www.snipca.com/19449), it's far less bulky and even tougher.

At 2.2kg, the C910 falls into the 'luggable if necessary' category rather than than the truly portable, but this is partly because it's built to withstand rough treatment. And yet the flimsy lid didn't quite convince us in this respect, though the C910 does feel reasonably well made, with a very usable full-size keyboard and smooth trackpad.

SPECIFICATIONS

1.5GHz Intel Celeron 3205U processor • 4GB memory •16GB flash storage •15.6in 1366x768-pixel screen • Webcam • SD card slot • 1x USB 2.0 port • 1x USB 3.0 port • 802.11ac Wi-Fi • Chrome OS • 24x383x256mm (HxWxD) • 2.2kg • One-year warranty www.snipca.com/19453

HOW WE TEST

Computeractive is owned by Dennis Publishing, which owns a hi-tech facility for testing the latest technology. You'll often read references to our benchmark testing, which is a method of assessing products using the same criteria. For example, we test the speed of every PC and the battery life of every tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate.

Dennis Publishing also owns the magazines *PC Pro, Computer Shopper, Web User* and *Micro Mart* and the website Expert Reviews (www.expertreviews.co.uk). This means we can test thousands of products before choosing the most relevant for *Computeractive*.

FAIR AND IMPARTIAL

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

OUR AWARDS



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

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



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

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

PRICES

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

VERDICT: It's a shame the display isn't better, but if you find small screens hard to read, the C910 could be the Chromebook for you



ALTERNATIVE: Toshiba Satellite C40-C £199 This 14in laptop with Windows 8.1 (upgradable free to Windows 10) is great value if Chrome doesn't appeal

Reviews

PC | £999 from Mesh www.snipca.com/19458

Mesh Elite Voyager Mini CS

Everything you want in a desktop PC, but smaller

Why do retailers always knock a penny or a pound off prices? Back when Computeractive was born in the 1990s, a practical general-purpose desktop PC used to cost about £1,000. But they'd always make it £999.

Some psychologists reckon this works because when we see an awkward number, we estimate the nearest round figure. So we see £999 and think £1,000. Now that we're thinking about £1,000, £999 sounds a bit less. And a bit less must be better value!



Economists, meanwhile, note that once a price point is established, it tends to stick. The £999 PC was around for quite a while. Eventually the cost of components drifted down, and you could get a pretty decent desktop for £899, then £699. Today you can find something without too many compromises even for £499, or five hundred quid, as your brain just rightly estimated.

That being the case, why would you spend a grand on a PC? The compact Mesh Elite Voyager Mini CS answers the question rather elegantly, and, of course, with a pound to spare. On the outside, it's not so much like a PC as a first-aid box. The plain white case also comes in





black, which makes it all but invisible.

If you're using it as part of a homeentertainment system, it could be tucked away wherever you'd put a subwoofer (assuming your cables stretch that far). Its big, quiet fans won't be audible there. It does lack a standard DVD drive (they really will be extinct soon) so there's no need to keep it within easy reach.

What's inside? For starters you have an Intel Core i7-6700K processor, from Intel's new Skylake range, which would cost you £300 on its own. It's very fast. As a comparison, we've seen £500 PCs using AMD's Athlon X4 860K processor, which runs at 4GHz - like the i7-6700K. However, the Intel processor scored nearly three times higher in our tests.

That means it'll cruise through any task, no matter how ambitious, aided and abetted by a generous 16GB of memory. If you think you'll need even more, for £168 you can upgrade to 32GB when ordering, or swap the modules later yourself. Heavy-duty creative jobs, like video editing, will benefit from the Nvidia GeForce GTX 970 graphics card, as long as your software can take advantage of it.

To store all your programs and files, the 1TB Seagate Barracuda hard drive is included. It is exceptionally fast, but you also get a 250GB SSD on a high-speed M.2 connector. With Windows 10 running from this, you can start up the PC and load programs almost instantly. There are three SATA3 connectors left over for more internal drives if you need them later (you will if you shoot a lot of photos or videos).

The two handy USB ports on the front of the case support USB 3.0, and there are four more like them on the back, along with two meeting the even faster USB 3.1 standard and two basic USB 2.0 sockets for your mouse and keyboard. All your older USB peripheral devices can plug into any of those. Both wired and wireless networks are handled at top speed by a Gigabit Ethernet port and 802.11ac Wi-Fi, the latter with an external aerial for the best reception.

Not everyone needs to spend this much on a PC. But if you want no limitations and no need to upgrade for years to come, the Voyager Mini CS is a fine choice.

SPECIFICATIONS

4GHz Intel quad-core i7 6700K • 16GB memory • 250GB SSD • 1TB hard drive • Nvidia GeForce GTX 970 • 2x USB 3.1 ports • 6x USB 3.0 ports • 2x USB 2.0 ports • Gigabit Ethernet port • DVI port HDMI port • 2x Mini DisplayPort • Windows 10 • 210x250x374mm (HxWxD) • Two-year warranty www.snipca.com/17781

VERDICT: The Intel Skylake i7 processor gives you exceptional processing power, and the rest of this system amply keeps up



ALTERNATIVE: Scan 3XS Z170 £1,070 This impressed us in the autumn, but it has a weaker i5 processor and only 8GB of memory, so the Mesh is better value



PC MONITOR | £305 from Insight www.snipca.com/19480

Philips 272S4LPJCB

A big screen with style

Twisted nematic and in-plane switching are types of what? You'd probably only encounter this question on Mastermind if your specialist subject was 'geeky jargon'. For what it's worth, they're types of LCD panels.

It was twisted nematic (TN) displays that, in the 1980s, first made flatscreens viable. A backlight shines towards two polarising glass plates, one at right-angles to the other. Because a polariser cuts out all light waves except those aligned with it, this eliminates half the light and then the other half, leaving darkness.

f It's very adjustable with a decent screen, but nothing justifies the hefty price tag ""

But within each pixel, LCD crystals lie between the plates in a twisted pattern. These rotate the light that's passed though the first polariser so it can pass through the second. Only when a voltage is applied to break the pattern does the pixel go dark. This system is repeated across trios of red-, green- and bluetinted pixels to make a colour image.

TN screens couldn't show a full range of colours, though, and looked wrong when viewed off-centre. In the 1990s, in-plane switching (IPS) displays rearranged the crystal molecules to scatter less of the light, enabling wider viewing angles and more accurate colours. The downsides were lower contrast and slower switching, causing ghosting in moving images.

For a long time, IPS was considered superior. But TN was evolving too, and now many mid-range TN monitors are

SPECIFICATIONS

27in TN LCD • 2560x1440-pixel resolution • 1x HDMI port • 1x DVI port • 1x DisplayPort • 1x VGA port • 540x639x244mm (HxWxD) • One-year warranty www.snipca.com/19479



just as good. Here's one. The Philips 272S4LPJCB impresses even before you turn the screen on: its matt grey finish looks professional, and the understated case exudes quality.

With 12cm of height adjustment, rotation, tilt and the ablity to pivot into portrait mode, it's easy to get the screen exactly where you want it. A pair of 2-watt speakers caters for basic audio, and if you prefer headphones for music or films, there's a handy 3.5mm jack on the bottom edge.

In our tests, the display covered an excellent 99.6 per cent of the sRGB colour range, with good contrast. But colours weren't always accurate: greys looked slightly red, and reds were too vivid. It's good enough for everyday photo editing, and from wider angles we only saw a mild shadow effect. The on-screen menus provide lots of options, including showing two inputs at once and dimming when you walk away.

The monitor's sticking point is price. We couldn't find it for under £300, and that's more than you need to pay for a good but unexceptional 27in screen.

VERDICT: This is a beautifully made monitor with lots of adjustments, but nothing stands out quite enough to justify its cost



ALTERNATIVE: AOC Q2778VQE £215

It doesn't rotate and there's no height adjustment or

speakers, but this much cheaper TN panel has better colour accuracy



The best... Headphones

Skullcandy Grind

£30 from

www.snipca.com/19513

A comfortable pair of headphones makes radio or TV on your PC or mobile device much more involving. The Grind is an on-ear pair, which means it rests on the ear - unlike 'over-ear' headphones that cover it. It provides surprisingly great audio quality with a detailed rather than thumping bass. A mic is included.

Plantronics BackBeat Pro

£119 from

www.snipca.com/19517

These chunky over-ear headphones have two special features: wireless and noise-cancelling. They can connect to your PC, phone or tablet via Bluetooth, and built-in audio technology can block out background noise, both for you and for callers listening to you via the inline mic. Sound quality is excellent, although the cups won't completely encircle most ears.

Sennheiser Momentum 1.0

£100 from www.snipca.com/19514

These closed-back over-ear headphones (not to be confused with the Momentum On-Ear) were originally much more expensive, and are now discounted because they've been superseded by a new

model. Their flat, spacious sound, with rich bass and lots of detail, will do justice to the highest-quality audio.

AKG K451

£40 from

www.snipca.com/19516

These cushioned on-ear headphones have been popular for years. Supplied in a travel case, they fold up small but sound big, and come with an inline mic and remote, and some handy jack adapters. They're a classic blend of quality and convenience.



Reviews

PHONE | £429 from Huawei www.snipca.com/19492

Huawei Mate 8

A super-sized smartphone

When the iPhone was launched in 2007, it changed mobiles forever. Previously, a phone was mostly buttons. Now it was mostly screen. In fact, so much of it was screen that there was no obvious reason for the other bits. Surely it might as well go right to the edge?

Manufacturers still haven't quite figured out how to achieve that, but this extra-large smartphone from Huawei is as close as we've seen. There's a sliver of space at the top for the speaker and selfie camera, and a slightly larger sliver at the bottom for... well, just to write 'Huawei' on. The 6in screen fills all the space in between, leaving only the slenderest of borders to the left and right.

ff A large, impressive screen makes use of every inch, but the camera is poor ""

This means that even though it has a noticeably bigger display than Apple's iPhone 6s Plus, the Mate 8 is almost exactly the same size overall. Available in black or white, it's half a millimetre thicker than Apple's phone, but that's sufficient grip so you won't let go of it, and the simple metallic design makes it a very striking device.

Nor will you be disappointed when you

still pretty slim. Chamfered edges provide

turn it on. The fingerprint sensor on the

to notice, because we test lots of different Android devices. You might not find it much different from any other phone. The touchscreen, as you'd expect, responds instantly to taps and swipes, and everything happens quickly and smoothly. The Mate 8's Kirin 950 processor comfortably beat leaders like the iPhone 6s and Samsung's Galaxy S6 in tests where all of its eight cores could be used, and even in

back wakes it from sleep incredibly

quickly, and when the huge display lights

up it looks great. It's bright with great

contrast, and our tests found it covered

99.3 per cent of the sRGB colour range.

With a standard Full HD resolution of

1920x1080 pixels, it's not quite as sharp

as most current high-end smartphones,

Things aren't quite so impressive when

but you'd be hard pushed to see the

you come to using the software. The

Mate 8 comes with the latest version

Marshmallow), which is good. But

with rounded corners that imitate

such a large screen.

of Google's Android (6, also known as

Huawei has put its own 'skin' over the

top, which is bad. App icons look basic,

Apple's but don't suit Android, and the

way some of the screens are laid out just

wastes space, which looks ridiculous on

Still, that's the sort of thing we're likely

difference with the naked eye.

single-core tasks it was up at the top table. Complicated web pages - a stumbling block for a lot of Android phones - didn't challenge it at all.

The Kirin doesn't handle graphics quite so well, meaning it could struggle with more demanding 3D games, especially as time goes on. You'll rarely notice a problem if you stick to more prosaic games, even prettier ones such as

Hearthstone. The Mate 8's broad format gives it room for a large battery, which lasted us just short of 12 hours of video playback, so you can usually be sure of getting through the day. The Mate 8 has one final flaw, though.

Its 16-megapixel rear camera takes pictures that are acceptable at first glance, with good colour and contrast indoors and out. But look closer, and what should be detail is a smeary blur. We've seen plenty of worse cameras, but rarely on phones this pricey. Similar Android phones take much crisper photos.

That's a shame, because Huawei had almost convinced us bigger was better. Web browsing, watching videos and typing emails feels less cramped on the Mate 8 than on a regular phone, even if it's not always easy to use with one hand.

SPECIFICATIONS

6in 1920x1080-pixel screen • 16-megapixel rear camera • 8-megapixel front camera • 32GB flash storage • MicroSD card slot • 802.11ac Wi-Fi • Bluetooth 4.2 • 3G/4G • 157x81x7.9mm (HxWxD) • 185g • One-year warranty www.snipca.com/19492

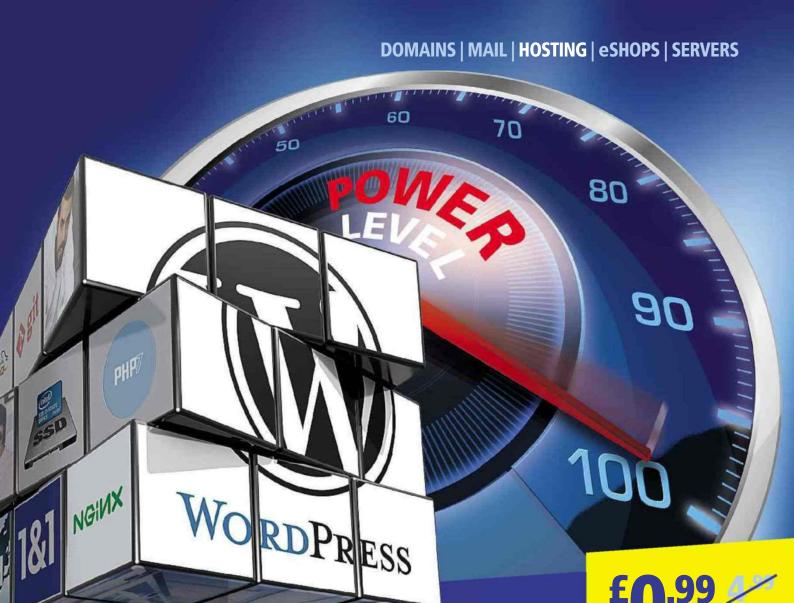
VERDICT: The camera and software leave a lot to be desired, but the Mate 8 gets our vote for squeezing such a large screen into a handy-sized device



ALTERNATIVE: Samsung Galaxy Note 5 £500 This muchpraised phablet is expected to reach the UK any day now, so it might be worth holding fire to compare the two







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Reviews

PHONE | £408 from 02 www.snipca.com/19505

Sony Xperia Z5

A more interesting phone than you think

Sometimes the best upgrades are the subtlest. Sony's Z2, Z3 and Z3+ made slow progress, and the Z5 still looks much the same. But this is actually a great new phone. As before, the metal and glass case (available in white, black, blue-green or gold) is resistant to water and dust. Its characteristic square corners are protected by bumpers, and the frame now has a slight lip at the rear, which we reckoned would protect the elegantly frosted glass back.

ff Slick design, clever features and great battery life, but don't drop it ""

How wrong we were! We managed to drop the test model - and its rear panel shattered. All things considered, you might want to use a protective case.

Assuming you're less clumsy than us,

SPECIFICATIONS

5.2in 1920x1080-pixel screen • 23-megapixel rear camera • 5.1-megapixel front camera • 32GB flash storage • MicroSD card slot • 802.11ac Wi-Fi • Bluetooth 4.1 • 3G/4G • Android 5.1 • 154x76x7.8mm (HxWxD) • 180g • One-year warranty www.snipca.com/19506

you should appreciate the Z5's design, which rivals Apple's for luxurious minimalism. A fingerprint reader has been added to the power button on the right-hand edge, the most sensible location we've seen easy to reach when you pick the phone up or when it's lying flat. We also like the way Sony provides a camera-shutter button at the bottom right. However, to accommodate this,

it has moved the volume controls directly above the shutter, making them more fiddly to use and easier to activate by accident.

A brand new rear camera brings a larger sensor chip and a wider aperture as well as higher resolution. SteadyShot optical image stabilisation avoids wobbly photos and brings a lovely smoothness to videos. Our pictures didn't quite match those from Apple's latest camera, especially in low light, but we were more than happy with them.

In our tests, the Snapdragon 810 processor kept Android 5 running very smoothly, and the medium-sized Full HD screen showed high levels of brightness, contrast and colour accuracy.

Battery life is excellent (Sony claims the

Z5 will last up to two days). It certainly lasted a day even with some gameplaying. Our only grumble is that there's no charger in the box - you're expected to provide your own USB mains adapter or charge more slowly from a PC's USB port.

VERDICT: It's not outstanding at any one thing, but the Z5 gives you all the right features and no major flaws in a beautifully understated phone



ALTERNATIVE: Google Nexus 6P £440 This slightly larger phone lacks a microSD slot for extra storage, but comes with Android 6 and is a worthy rival



WHAT SHOULD I BUY? We solve your buying dilemmas

What's the best laptop for web browsing?

I am looking to buy a laptop for browsing digital newspapers, reading horseracing websites and occasionally playing video. I'm not looking for a lot of storage or features such as a camera, but ease of use and security are important. Battery life is also not a top priority because I can recharge every day.

Can you tell me whether a Chromebook is my best option? Ralph Dandridge

A Chromebook does sound as if it could fit the bill. Using Google's operating-system software instead of Windows, these machines focus their limited processing power on making web access smooth.

They're inherently well protected against malware, so you don't need to add antivirus software. However, you should still take basic precautions like checking the reputation of a website before entering credit-card details. And with fewer features, you shouldn't find

there's much to go wrong or cause confusion.

Since reading is your priority, consider Toshiba's Chromebook 2 with Full HD (£270 from Currys: www. snipca.com/19510 - see image), which has a sharper screen than most of its rivals, though it doesn't load web pages as fast as some. Its battery lasted us seven hours of video playback.

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





FITNESS BAND | £200 from Microsoft www.snipca.com/19539

Microsoft Band 2

A fitness band that we could live with

One of the best reasons to buy a smartwatch – and let's be honest, there aren't many – is to help you keep fit. Some wrist devices concentrate almost entirely



on this, including Fitbit, Jawbone and Microsoft's Band. This new Band offers more comfort and practicality, with just enough smartwatch features to suit people who want both.

Like its rivals, the Band 2 is essentially a rubber bracelet, but thanks to its big touchscreen it looks more like a futuristic watch. It isn't waterproof enough for swimming, but the occasional splash won't be a problem, and toughened Gorilla Glass protects the front. The display is now curved to fit your wrist – a big improvement – and presents text and figures clearly.

Opposite this is a chunky clasp incorporating a secondary battery and some of the 10 medical sensors. The way this sits inside the bracelet feels odd at first, but it has a benefit: even with the band securely tight, only the top and bottom sections are in contact with your skin. The gaps at the sides help you avoid a build-up of sweat, while the battery lasts between one and two days and charges in an hour and a half.

The Band 2's main purpose is to track your exercise. It can count your steps, display the distance you travelled using its built-in GPS, chart your heart rate and calculate how many calories you burned. There are sleep-analysis features, too, and you can use 'guided workouts', where the Band 2 tells you what to do via the screen and vibrations.

A lot can be done on the device itself, but it's designed to work with a smartphone (Apple, Android, Windows Phone and Windows 10 Mobile are supported). A couple of features, including voice control, only work with Windows phones, though. Connected wirelessly to your phone, the Band 2 can also notify you of incoming emails, calls, Facebook alerts and so on, but the apps available are fewer and simpler than for something like the Apple Watch.

It's not cheap for a fitness band, but not bad value given the technology packed into it. If you want something to encourage you to exercise, the Band 2 could be worth it.

SPECIFICATIONS

32x13mm display • Accelerometer • Gyrometer • Light sensor • Skin-temperature sensor • UV sensor • Capacitive sensor • Galvanic skin-response sensor • Barometer • One-year warranty www.snipca.com/19539

VERDICT: A good choice if you want comprehensive health and fitness tracking with the basic features of a smartwatch



ALTERNATIVE: Fitbit Surge £160 The first Fitbit that's also a watch, this has similar features to the Band 2 but overall feels like neither one thing nor the other





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Reviews

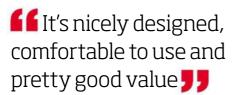
GRAPHICS TABLET | £65 from Ebuyer www.snipca.com/19495

Wacom Intuos Art

The pen is mightier than the mouse

If engineers Doug Engelbart and Bill English hadn't come up with the computer mouse, we might all be controlling our computers with pens. But styluses ended up confined to graphics tablets, a niche option for professional artists. Meanwhile, the rest of us got to push flat plastic blobs around our desks.

There are times when we could all do with a pointier pointer, though. Years after Steve Jobs declared them dead, Apple is just one of the companies resurrecting styluses. So maybe we should look again at graphics tablets too.



Wacom is the big name in this area, and although its Intuos Pro and Cintiq tablets are beyond most budgets, it also offers much more affordable versions. The Creative Pen & Touch Tablet is sold as Intuos Art, Intuos Photo or Intuos Comic; the difference is in the software that's included. With the Art, you get Corel Painter Essentials 5, a basic version of the leading 'natural media' program, used by artists and illustrators to produce artwork reminiscent of paints, pastels and pencils.

The Creative Pen & Touch Tablet feels plasticky, but is nicely designed. Extra buttons on the surface and on the pen let you operate functions without having to reach for your keyboard. It's much smaller than the tablets you'll see in

commercial studios, with a drawing area that's slightly less than half A4, but we found there was still just about room to draw comfortably. It recognises finger taps and gestures as well as the stylus, and you can control regular Windows features as well as art software.

Like most graphics tablets, it's just a sensing surface, not a screen: you plug it into your PC via USB. As you draw 'blind' with the pen, your work appears on the monitor. It senses pressure, so you can vary lines by pressing harder, making drawing feel quite natural.

It's never going to be as natural as drawing on an iPad, especially with an 'active' stylus, such as the Adonit Jot Touch PixelPoint (for iPads, £57 from www.snipca.com/19498), or Apple's Pencil (for iPad Pro, £79 from www. snipca.com/19499). That's the way to go if you can afford it. For Mac users, the Astropad app (£8) even lets you use the iPad as a graphics tablet for your desktop software. Unless you already have an

> iPad, though (there are no comparable styluses for Android), the Intuos is much cheaper.

Which bundle should you buy? Intuos Art has an official price of £75 including Painter Essentials 5, which is £30 on its own. Intuos Comic swaps this for Anime Studio Debut 10, a good

choice for beginners who want to learn how professional animators work. For still comics, you get a two-year trial of Clip Studio Paint Pro (also known as

Manga Studio 5), normally £35, which you can pay to upgrade or use as a cut-down version when the trial expires.

Intuos Photo (also £75) comes with the full version of Corel PaintShop Pro X8 (worth £45). Mac users also get a version of Macphun Creative Kit thrown in, which would normally cost over £70. This will make PC users feel short-changed, but it's still a good deal. You can knock a few pounds off all of these prices if you shop around.

You can also buy Intuos Draw at just £55, with ArtRage Lite, a £25 painting program. This can be upgraded to ArtRage 4.5, for £21 (a 50 per cent discount). The catch is that you get the plain Creative Pen tablet, which only recognises the stylus, not your fingers.

SPECIFICATIONS

Corded tablet with cordless stylus • USB • Active area 152x95mm • 290g • Two-year warranty • Requires Windows 7 or OS X 10.8.5 or later www.snipca. com/19496

VERDICT: Mastering a graphics tablet takes some time, but this one is usable and good value if you want to improve



ALTERNATIVE: Huion H610 Pro £64

If you want a bigger tablet, this is a popular and decent option for the price, though it can be fiddly to set up



DISPLAY DOCKING STATION | £57 from Amazon www.snipca.com/19529

Microsoft Display Dock

Windows 10 Mobile, which replaces Windows Phone, is only available on two smartphones so far - Microsoft's Lumia 950 and Lumia 950XL. Its main selling point is how close it is to 'proper' Windows 10, as opposed to other phones that run mobile-specific software, such as iOS and Android. And the best example of this is a feature called Continuum that lets you use your phone as a PC. It requires a monitor and a little grey gadget called the Display Dock.

Use your Microsoft phone as a PC

f It could save Windows 10 Mobile users buying a PC "

This is a small but heavy box, about the width of a phone and an inch high, perforated with ports. If you thought we were living in a wireless era, Microsoft is having none of it. You connect your Lumia 950 or 950XL (it won't work with other phones, not even older Lumias that can be upgraded to Windows 10) with a cable from its USB Type-C port, and attach the Display Dock's mains adapter to its own USB Type-C port. This keeps your phone powered. Your monitor plugs in via HDMI or DisplayPort.

Once this is set up, what looks like Windows 10 appears on the monitor, as if from a PC. You can still use your Lumia phone for any of its usual purposes, like making calls, but at the same time, it's





running Windows 10 Mobile in the background. Bear in mind, you can only open 'universal' apps – those designed for both desktop and mobile. This includes Microsoft's Office apps and the Edge web browser, through which you can access services like Netflix, but most of the other apps you might have on your Lumia, or on your PC, won't work.

Adding a USB or Bluetooth keyboard and mouse gives you the full impression of using a PC, and we found it worked pretty well. Web browsing was a bit jerky, but editing in Word and playing videos was smooth. It's an interesting idea that could save Windows 10 Mobile users buying a basic PC. But with few other reasons to choose a Microsoft phone, there may never be many Windows 10 Mobile users to take advantage.

SPECIFICATIONS

2x USB Type-C ports • 3x USB 2.0 ports • HDMI port • DisplayPort • Requires Microsoft Lumia 950 or 950XL phone • 26x64x64mm (HxWxD) • 230kg • One-year warranty www.snipca.com/19524

VERDICT: It's a good way to make the most of modern devices' processing power, but Continuum won't tempt many Apple or Android users to switch to a Windows 10 phone



ALTERNATIVE: BenQ EW2440L £140

An MHL monitor like this will display your Android device's screen (if the device supports it) so you can see mobile apps in larger form



COMING SOON

SPRING 2016

Apple's next batch of mobile devices could arrive in March. The third version of the iPad Air 3 could add support for the iPad Pro's excellent Pencil stylus. The company may also return to the iPhone 5's smaller 4in format with a lower-cost smartphone.



SPRING 2016

Due in March, HP's EliteBook Folio G1 could be the first ultra-slim laptop to go one better than Apple's 12in MacBook. Comes with an even sharper screen and a 180-degree hinge for more flexibility, but will be too expensive for many people.

SPRING 2016

Lenovo's Link is a USB stick that connects an Android device to a PC, letting you operate mobile apps from your keyboard or display the device's screen in a window. Expected to cost £40, it contrasts with Microsoft's Display Dock, which lets you use a Windows 10 phone as a PC.

SUMMER 2016

Zotac thinks it invented the 'mini PC'. Among the new range it's planning this summer is an upgrade for the C series that squeezes Intel's latest 'Skylake' Core i5 processor into a box the size of a large sandwich. These cheap, compact machines are reviving interest in desktop PCs.



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Our pick of products that have won the Buy It award

LAPTOP

Asus UX305

£570 from www.snipca.com/19439



13.3in is a practical size for a laptop, and this light but sturdy 'ultrabook' has a smart and slim design that does justice to its capable performance. Upgradeable to Windows 10, it's limited mainly by its 128GB SSD, which makes it work fast but might leave you needing more space.

ALTERNATIVE Toshiba Satellite C40-C

This 14in Windows 10 laptop looks like it cost a lot more. It's not the most amazing PC, but it's fantastic for the price. £200 from www.snipca.com/19436

DESKTOP PC

Palicomp AMD Shockwave £500 from www.snipca.com/18748

Tested: Issue 464



Proving that you don't need an Intel processor, Palicomp has built an excellent PC around AMD's Athlon X4 860K and Radeon R7 370 graphics card. Runs Windows 7, 8.1 or 10.

ALTERNATIVE: Chillblast Fusion Orion

i3 As long as games aren't a priority, this almost invisibly plain black box has all you need in an all-round budget system. £380 from www.snipca.com/19427

TABLET

Apple iPad Mini 4

£319 from www.snipca.com/18100 Tested: Issue 460



The 2015 update to Apple's 7.9in tablet greatly improves the screen and camera, boosts performance, and makes it worth the £100 extra over the iPad mini 2 (still a good budget buy). Go for the £399 64GB version if you can, though.

ALTERNATIVE: Apple iPad Air 2 The 9.7in option is still slim and light, also has Touch ID and Apple Pay, and the range of apps beats Android. £399 from www.snipca.com/18139

PHONE

Apple iPhone 6s

£539 from www.snipca.com/18240 Tested: Issue 461



It may look like the 2014 model, but this update is stronger and faster, with a higher-resolution camera, time-saving 3D Touch features and an excellent screen. The bigger 6s Plus has better battery life.

ALTERNATIVE: Moto X Play Motorola's fun phone may be plasticky, but it runs Android 5 smoothly. The screen, camera and battery life are all big pluses. £260 from www.snipca.com/17934

DIGITAL CAMERA

Panasonic Lumix FZ330

£449 from www.snipca.com/19441 Tested: Issue 462



A wide-angle lens to capture scenes, a longer fast lens for flattering portraits and a telephoto for distant subjects - the 12-megapixel FZ330 gives you them all in one unit, with a fixed highquality zoom lens.

ALTERNATIVE: Sony A5000 This neat compact system camera (CSC) lets you choose different lenses from Sony's range for more creative possibilities. £249 from www.snipca.com/15854

E-READER

Amazon Kindle Paperwhite

£100 from www.snipca.com/17776 Tested: Issue 458



With a new high-resolution screen, the affordable Kindle lacks only automatic brightness adjustment and page-turn buttons (you have to swipe the screen). It's great value as long as you're happy to buy your books from Amazon.

ALTERNATIVE: Kobo Glo HD As good as the Paperwhite, but with more storage, and slightly more compact, this is the independent e-reader to pick. £90 from www.snipca.com/19158



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SECURITY SOFTWARE

Kaspersky Internet Security 2016

£19.99 from www.snipca.com/17874 Tested: Issue 437



Kaspersky Internet Security 2016 has won our past seven antivirus tests. Compatible with Windows 10, the 2016 edition is available at an exclusive reader discount on our Software Store. Go to the link above for a one-device licence, or buy a three-device licence for just £39.99 at www.snipca.com/17903.

ALTERNATIVE: Avast Free Antivirus

Almost as good as Kaspersky, but sometimes blocked legitimate software. Free from www.snipca.com/16493

PHOTO EDITING

Adobe Photoshop Lightroom 6

£104 from www.snipca.com/16952 Tested: Issue 453



Lightroom is the professional's choice for managing and tweaking photos, including raw files from DSLR cameras. If you need Photoshop for more advanced editing, get both on the Adobe CC Photography Plan for £8.57 a month (www.snipca.com/19283)

ALTERNATIVE: Xara Photo & Graphic

Designer 11 For all-round design and drawing plus photo filters, this affordable app has a lot to offer. £50 from www.snipca.com/19280

SMART TV

Samsung UE40H5500

£398 from www.snipca.com/19160 Tested: Issue 446



A 40in smart TV with great picture quality and apps for all the terrestrial TV catch-up services. It has plenty of extras too, such as recording to USB storage, playing media files stored on a NAS or USB stick and plenty of HDMI ports.

ALTERNATIVE: Sony KDL-43W755C

Excellent image quality, stylish looks and a 43in screen. £429 from www.snipca.com/18153

PC MONITOR

AOC 02778V0E

£215 from www.snipca.com/19416 Tested: Issue 468



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

ALTERNATIVE: Dell UltraSharp U2414H

This 1920x1080, 24in screen has a stand that can switch to portrait mode. Colour accuracy is excellent. £188 from www.snipca.com/18207

ROUTER

Trendnet TEW-812DRU

£122 from www.snipca.com/19437 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. £180 from www.snipca.com/14950

NAS

Synology DiskStation DS215i

£132 from www.snipca.com/16187 Tested: Issue 449



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

ALTERNATIVE: Synology DS414j

A four-drive NAS that's generally fast, easy to set up and use. £242 from www.snipca.com/16707

HOMEPLUGS

Devolo dLAN 1200 Triple+ Starter Kit

£119 from www.snipca.com/15369 Tested: Issue 444



Devolo's latest HomePlug adapters are the fastest we've ever seen. They're well designed too, with a passthrough socket so you can still power another device and the design should avoid skirting boards and other obstacles.

ALTERNATIVE: D-Link PowerLine AV2 1000HD Gigabit Starter Kit Fast (speeds of up to 1000Mbps), much cheaper and very easy to set up, but the lack of a passthrough socket is frustrating. £43 from www.snipca.com/17836

WEB-DESIGN

Xara Web Designer Premium 11

£70 from www.snipca.com/16955 Tested: Issue 453



This visual web-design program makes creating sites more like laying out a document than writing HTML code, and sites can be responsive, meaning they look right on both big and small screens without extra work. A basic version is also available for half the price.

ALTERNATIVE: Incomedia WebSite X5 v12 Evolution It may feel a little basic, but this straightforward program outputs efficient HTML code and responsive pages £38 from www.snipca.com/19440

COMPETITION

Win 1 of 5 Xara Photo & **Graphic Designer 11**

The 11th version of Xara Photo & Graphic Designer, which won a five-star 'Buy It' award in Issue 467, has plenty of outstanding new features. These include



pounds. To enter, email your address to

cacomp@dennis.co.uk with 'xara' in the

subject line by midnight 1 March.

Xara Photo & Graphic Designer 11 is available to buy now priced £50 from Xara (www.snipca.com/19280). For more information visit www.xara.com, follow @XaraGroup on Twitter, and 'like' www.facebook.com/XaraGroup.

MULTIFUNCTION PRINTER

Canon Pixma MG6650 £88 from www.snipca.com/17334 Tested: Issue 455



It may look like something that James Bond would have to defuse, but this low-cost, all-in-one printer is an excellent choice. Running costs are reasonable too – buy the XL cartridges and running costs work out at 7.7p per colour page or 2.4p for black and white. This makes it very affordable to run.

ALTERNATIVE: Canon Pixma MX495 It's slow, and black ink is pricey, but this cheaper MFP has a paper feeder and fax too. £41 from www.snipca. com/17174

SOLID-STATE DRIVE

Crucial BX1001TB

£267 from www.snipca.com/19572 Tested: Issue 445



A blindingly fast, high-capacity SSD at a lower price than ever before. If

you've been put off buying a SSD because of the cost, then now is finally the time to take the plunge.

ALTERNATIVE: Samsung 850 Pro 256GB An even faster SSD, but it's much more expensive per gigabyte. £110 from www.snipca.com/16498

SECURITY CAMERA

Y-cam HomeMonitor HD £135 from www.snipca.com/11646 Tested: Issue 420



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

ALTERNATIVE: D-Link Wireless N Day & Night Camera A good-value security camera with excellent night vision. £88 from www.snipca.com/15275

active active

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Workshops & Tips



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

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Edit your PC's registry without errors

What you need: Registry Finder; Any version of Windows (XP to 10) Time required: 30 minutes

diting your PC's registry can be a complicated process because it involves navigating through multiple menus to a registry key, then making precise changes to it. One small mistake can cause your PC problems. Unfortunately, the Windows Registry

Editor doesn't let you search for specific keys or copy and paste a specific key location to go directly to it. Registry Finder is a brilliant free program that lets you do both these things, while minimising the risk of making serious errors.



STEP It's always a good idea to create a system restore point for your PC before you start editing your registry. This lets you undo any mistakes you may make. Press the Windows key on your keyboard, type restore point, then click 'Create a restore point'. In the System Properties window that opens, click Create 1, name your restore point 2, click Create 3, wait until that's done, then click Close.



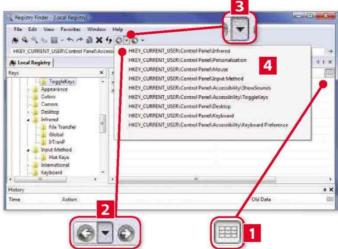


Before installing Registry Finder, you need to find out your PC's version. Right-click Computer, click Properties and look next to 'System type' . Next, create a new folder on your Desktop. To install the program, go to www.snipca.com/19457 and click the link (64bit or 32bit) 2 that corresponds to your PC. Open the downloaded zipped folder and extract its files to the folder you created. Finally, open this folder on your Desktop, click the RegistryFinder setup file, then click Run to launch the program.

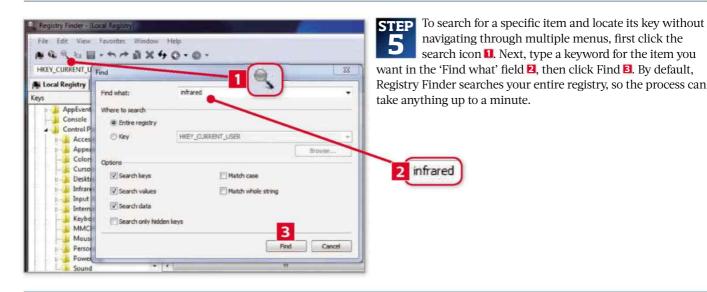
Workshops



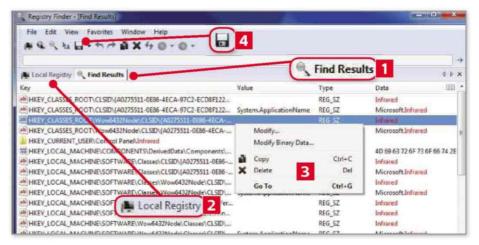
The handiest feature of Registry Finder is the ability to STEP go directly to any registry key simply by typing (or copying and pasting) its location path in the address bar at the top (in Registry Editor you must navigate multiple menus). For example, type **HKEY_CURRENT_USER\Control Panel\Accessibility\ToggleKeys** ■ into the bar at the top, then press Enter to reach the ToggleKeys key 2. You can use this method whenever you come across the path of a registry key (in Computeractive or online, for example) that you want to edit.



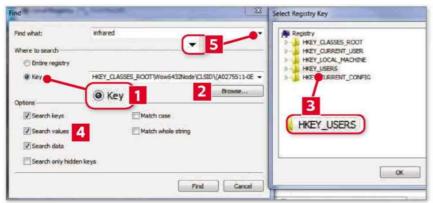
By default, the registry keys are listed vertically in the STEP section on the right. If the section contains numerous keys, click the Grid Lines button 11 to add a grid that will help you distinguish them. You can jump back or forward between the registry keys by clicking the Back or Forward buttons 2. You can also click the dropdown menus beside each button **3** to see a list of all the keys you visited previously. From here, click the key 2 you want to jump to.



You'll see your results in a new Find Results tab 11. Every instance of the word you typed will be highlighted red ('infrared' in this example). Double-click the key you want. It will open in your Local Registry tab 2. Right-click any of the entries for options to modify, copy or delete that key 3 (without having to navigate to it). For convenience, you can save this list of search results as a registry file that you can open with one click. To do that, click the Save icon 4, name your file, select where you want to save it on your PC, then click Save.

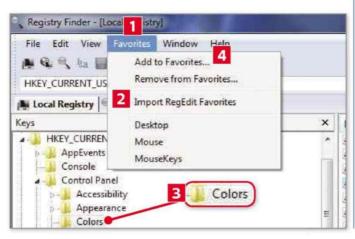


Edit your registry without errors

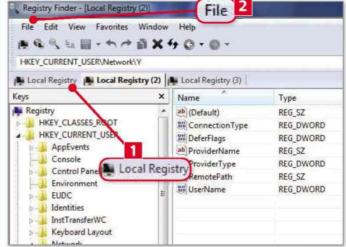


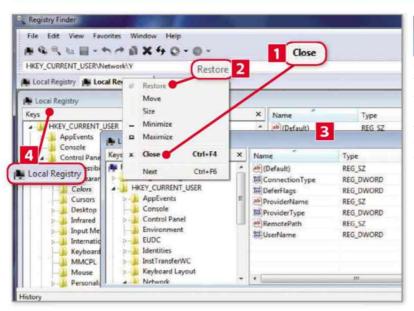
STEP If you have some idea where the key you want is located in your registry, then there's a faster way to search for it. Click the search icon in Registry Finder, then type the name of the key you want in the 'Find what' field. Next, select Key 1, click Browse 2, select where you think it's located **3**, then click OK. Use the Options boxes 4 to specify what you're looking for (a key, value, data, case or entire search string), then click Find to see your results in a new tab. The dropdown menu 5 lets you access any earlier search terms.

Like the Windows Registry Editor, Registry Finder has a Favourites section, which is useful for quickly reaching keys you often access. You can import any favourites from Registry Editor to Registry Finder. To do this, click Favorites **1**, Import RegEdit Favorites **2**, then click OK. Now click Favorites again and you'll see all your RegEdit favorites in a list at the bottom. To add a key you access often, simply navigate to that key **3** within Registry Finder, click Favorites, then click 'Add to Favorites' 4. Name the key whatever you want, then click OK.



Registry Editor lets you access only one registry key at a time. However, Registry Finder lets you navigate to multiple keys by opening them in different tabs (similar to opening separate tabs in Chrome). You'll already have the first tab (Local Registry) open. To add a second one, click File 2 then click Open Local Registry. Repeat this to open as many registry tabs as you want. You can now access multiple registry keys within each tab.





To close a tab, right-click it, then click STEP Close **1**. Another feature lets you compare any two adjacent registry tabs from within the same window. The tab on the left appears as a bigger window by default, so click and drag the tabs to rearrange their order if you need to. Right-click the tab you want to see as a smaller window, then click Restore 2. You'll now see both tabs open **3**. Double- click any of the windows' title bars 4 to exit this view.

Workshops

Change your passwords on hacked websites

What you need: Dashlane; Any version of Windows (XP to 10) Time required: 30 minutes

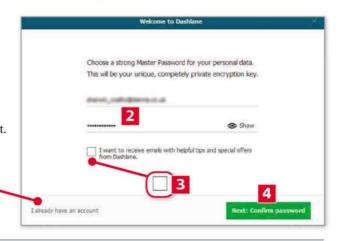
ashlane is a fantastic free password manager for your PC. The latest version has a new feature that lets you quickly, easily and securely change your password on any website you know has been hacked.

There are two ways to do this. The first is from within the program itself without even having to visit the hacked website. The second method directs you to the hacked website's 'Change password' page, from where you can create a new password.



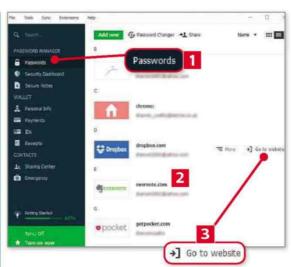
To download Dashlane, go to www.dashlane.com, and click the 'Get Dashlane - It's FREE' button. Click the downloaded setup file, then Run, Yes and wait for it to install. If you've used Dashlane before, click 'I already have an account' 11 and log into it. Otherwise, click 'Create your free account', enter your email address, type a password **2**, untick the box **3** (if you don't want to receive tips and offers from Dashlane), then click 'Next: Confirm password' 4. Finally, click 'I know it. Let's go!' to register your account.







Keep clicking Next until you reach the 'Now add Dashlane to your browser' screen, then click 'Add Dashlane now'. Your default browser will open and you'll be prompted to add the Dashlane browser extension. If you use Chrome, click 'Add it now. Finish set up!' 11, then 'Add extension' 2. Next click 'See what Dashlane can do'. You'll need to fill in your personal details, then click 'Great! Let's try it out'. In the blank form on the next page, click inside any field then click the pop-up menu to fill in the form automatically.

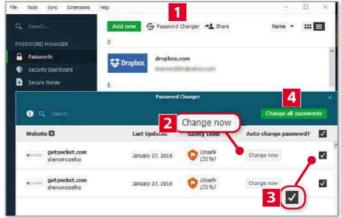


You'll now see tabs for sites, including Gmail, Hotmail and Yahoo. If you've previously logged into any of those websites on your browser, you'll be taken to that site by clicking its tab. Finally, click 'Go to the app' to open the Dashlane program on your PC. Click Passwords 11, then 'Click to start'. You'll see a list of the websites you've logged into 2. Move your cursor to any of the sites' icons, then click 'Go to website' 3. Dashlane will automatically log you into that website in your default browser.

STEP If you can't find a website you often use in Dashlane's list, there are two ways to add it. The first is to log into that website within your browser. You'll now see the option to save those details to Dashlane. Alternatively, in Dashlane, click 'Add new' 1, enter the website address 2, then your login details for the site **3**. Next, select a category from the dropdown menu (Shopping, Email, etc) 4, then click OK twice.

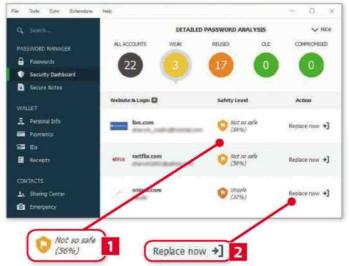


STEP Dashlane's new Password Changer feature lets you change your password on a hacked website without even having to visit it. At the moment only 500 websites are supported (see the list at www.snipca.com/19497), but new ones are added regularly. Click Password Changer 11, then click 'Got it!'. Now click 'Change now' 2 beside the relevant website. To change your passwords for multiple websites in one go, tick the boxes beside those websites' entries **3**, then click 'Change X passwords' at the top right. To change your passwords for all the listed websites, click 'Change all passwords' . Now whenever you want to log into any of these sites, open Dashlane, click Passwords, navigate to the website entry, then click 'Go to website' (see Step 3).



STEP If Dashlane's Password Changer doesn't contain a hacked website, there's another way to access the website securely and change your password there. Click Security Dashboard 1. Here you'll see a large percentage (this is how secure Dashlane rates all your account passwords). Dashlane lists sites which it recommends you create stronger passwords for (in this case Twitter and Evernote) 2. Click 'Replace now' 3. You'll automatically log into that website and go directly to its 'Change password' page. To see the other websites you've added to Dashlane's list, click Show 4.





Here, you'll see all your websites with Dashlane's safety level ratings (as a percentage) **1**. Click any of the Detailed Password Analysis sections at the top to see those sites. To change your password for any of these, simply click 'Replace now' 2 beside the relevant one. As in Step 6 this securely logs you into that website and directs you to its 'Change password' section, where you'll see the option to enter your old password and type and confirm a new one.

Workshops

Stop webcam hackers spying on you

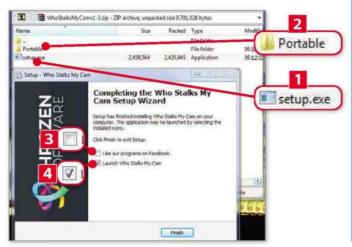
What you need: Who Stalks My Cam; Any version of Windows (XP to 10) Time required: 25 minutes

Your webcam represents one of the easiest ways for hackers to remotely spy on you. To protect yourself use the free program Who Stalks My Cam (made by software company Phrozen). It notifies vou every time vour webcam is switched on - either by you

or by someone remotely. It also logs which program used your webcam, when and for how long. What's more, you can use the program to set specific rules - for example, to automatically switch off your webcam when you're away from your PC.



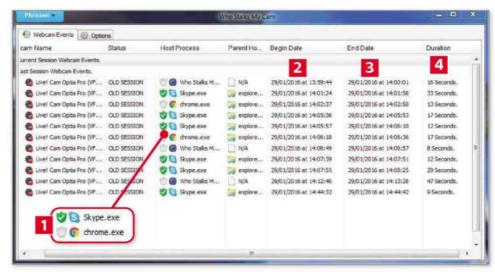
To install Who Stalks My Cam (WSMC), go to www. STEP snipca.com/19508, scroll to the bottom of the page and click Proceed Download. Open the downloaded compressed folder and run the setup file (run the Portable folder's 2 setup file if you want to install a portable version of the program). Now click Next, accept the licence agreement, then keep clicking Next until you reach Install, then click that. On the final screen, untick the first box 3, tick the second box 4, then click Finish to launch the program.



The program doesn't track your webcam activity by default, so click the Active Now button at the bottom right to let it start tracking. If you want to test whether your webcam is working, click the Phrozen dropdown menu □, and select Webcam Testing, then click Start to switch it on. Whenever your PC's webcam is activated (either by you or someone else), you'll see a pop-up notification 2. From here, you can either close your webcam 3 or terminate the program that's using it 4.

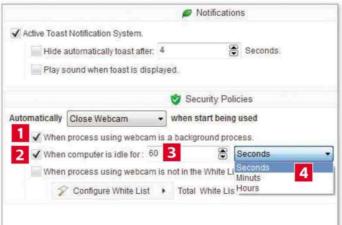


WSMC creates a log of every instance your webcam was used - by you, by someone else using your PC, or by a hacker accessing it remotely. This tells you which webcam was used (if you have more than one) and what program used it . Scroll to the right to see when the webcam was switched on 2. when it was turned off and how long it was used for 4.

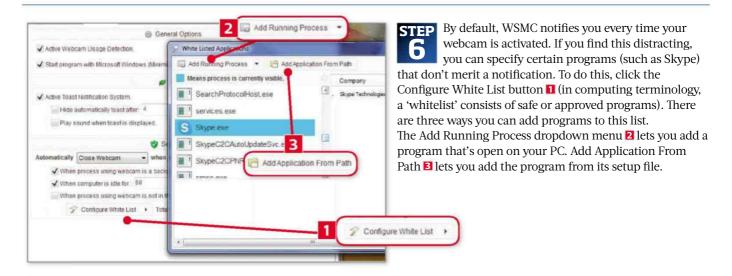




The Options tab lets you configure the program's settings. Tick both boxes in the General Options section – the first **□** lets you monitor your webcam's activity and the second 2 starts the program with your PC. Ensure Active Toast Notification System is ticked **3**. This displays the pop-up notification every time your webcam is activated (see Step 2). By default, you'll see this notification for four seconds, but you can extend or shorten this duration by ticking the 'Hide automatically...' box 4 and changing the value in the Seconds field.



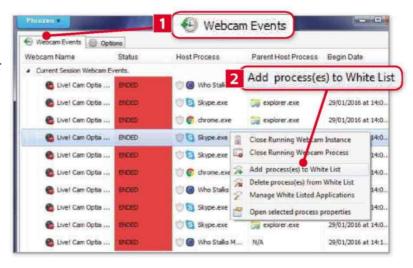
Hackers are likely to spy on you when your PC is idle. WSMC has excellent tools to counter this. Tick the first box in the Security Policies section 1 to automatically close your webcam when it's being used as a background process. Tick the second box 2 to automatically close your webcam when your PC is idle. Use the time field 3 and dropdown menu 4 to set how long your webcam stays on after your PC goes into idle mode.



your whitelist is to open and use it. Next, click the Webcam Events tab 11 to see it in WSMC's log. Now, right-click the program you want to add to your whitelist, then click 'Add process(es) to White List' 2. A green tick will appear beside that program. Add all your 'trusted' programs to this list, then click the Options tab and tick the last box at the bottom. This automatically closes your webcam if any program that's not on the whitelist tries to access it.

STEP

The third (and easiest) way to add a program to



Workshops

Improve your Windows 10 System Tray

What you need: TrayStatus; Any version of Windows (XP to 10) Time required: 10 minutes

7 our PC's System Tray (at the bottom right of your screen) informs you of any pending notifications or system updates. It also shows indicators for audio volume, battery life and internet connection.

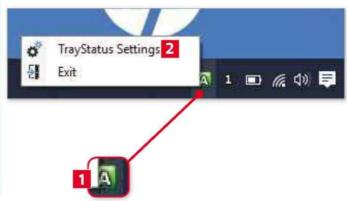
TrayStatus is a brilliant tool that adds all kinds of useful icons to your System Tray. It has indicators for Caps Lock and Num Lock, and you can add icons that tell you when your Control, Alt and Shift keys are pressed.

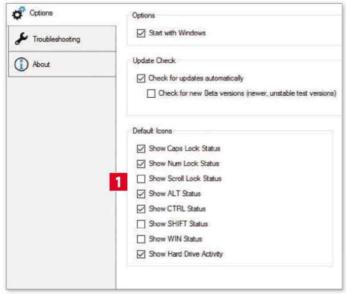


To install TrayStatus, go to www.snipca.com/19507 and click the blue Download Now button. Click the downloaded setup file, Yes, Next, accept the licence agreement, then keep clicking Next until you reach Install. Click this, then click Finish to launch the program. You'll see three new icons (1, A and a cog 11) in your System Tray. If you don't see these icons, click the 'Show hidden icons' 2 button to reveal them.

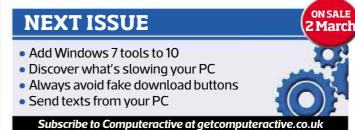


1 and A tell you respectively whether your Number Lock and Caps Lock keys are on. The cog icon shows you your PC's activity (R and W represent its Read and Write speeds). Click and drag the 1 and A icons from the 'hidden menu' to your System Tray to see them. If your Caps Lock or Number Lock key is on, the relevant icon will appear in a green box 11. You can add five other icons to your TrayStatus System Tray. To do this, right-click an icon, then click TrayStatus Settings 2.





In the settings, you'll see options to enable/disable all eight TrayStatus icons. Select those you want by ticking/unticking the relevant options 1. After doing that, click Apply, then OK. The Alt, Control, Shift and Windows keys will only be indicated as being switched on if you keep them pressed for a few seconds.



Readers' Tips

Handy hints and tips from your fellow readers M Email us your tips: letters@computeractive.co.uk

TIP OF THE FORTNIGHT

Stop Avast hijacking your email signature

Now, don't get me wrong, I've been using Avast Free Antivirus for three years and I generally agree with Computeractive that it's the best free antivirus program around. However, a few months back an Avast update quietly replaced my email signature with its own 'This email has been checked for viruses' signature. This affected the Outlook program on my Desktop, and my Yahoo and Gmail accounts online. The signature doesn't appear when you write your email, so it was only when a friend I emailed brought it to my attention that I

realised this was happening.

Thankfully, it's easy to disable this from within Avast's settings. Open Avast, click the settings (cog) icon at the top right, untick 'Enable Avast signature' and click OK. Your original email signature will now be restored. This option is automatically ticked whenever you update Avast, but there's a way to stop this from happening. In the Settings window, click Active Protection on the left, then click Customise beside Mail Shield. Next, click the Behaviour tab on the left, then untick 'Insert note into



clean message (outgoing)' (see screenshot). Finally, click OK twice.

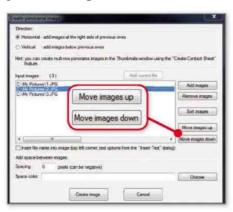
Harry Bourne

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

PHOTO EDITING

Create a panoramic image using IrfanView

Living in the beautiful Lake District, I'm lucky to be surrounded by some of the most breathtaking views in the country. I know it's considered a bit old-fashioned, but I prefer using my digital camera to capture these views (it's better than any phone). However, one feature it lacks is a panoramic mode. So I use IrfanView (www.irfanview.com) as my photo editor to merge adjacent views from the same spot into stunning panoramic images.



To do this, open IrfanView, click Image at the top left, then click 'Create Panorama image'. Now click 'Add images' and navigate to the folder containing your images. Next, press the Shift key, select the photos you want to merge, then click Open. Ensure your images are in the correct order (the image you want at the

far left of your panorama should be at the top of the list and so on). To rearrange your images, click its file name, then click the 'Move images up' or 'Move images down' button on the right (see screenshot below left). When you've finished, click 'Create image' at the bottom to merge your images into a panorama.

Brad Hawkins

SEARCH ENGINE Search for content on a specific website

On the day his death was announced, I came across a very interesting article on the great Terry Wogan on my mobile phone. But, distracted by a phone call, I didn't get round to finishing it. I tried to find the same article on my PC later that day, but couldn't locate it among the deluge of tributes and coverage. I'd almost given up, when my nephew came to the rescue.

I remembered the feature was on The Guardian's website, so he simply typed something into Google and voila! - the article appeared on the first page of the search results. He told me there were a few handy tricks that work on any search engine. To search for a particular term

Google site:theguardian.com intitle: terry wogan News Videos Images

(say, Terry Wogan) within a specific website (for example, The Guardian) type site:theguardian.com terry wogan into the search engine's URL bar at the top.

Similarly, you can search for a term that only appears in the headline of the article by searching for intitle: terry wogan. What's even better is that you can combine both search terms for a more nuanced result by typing site:theguardian.com intitle: terry wogan (see screenshot below left).

James Turner

PHONE CONTACTS Restore Android contacts you've accidentally deleted

I was spring-cleaning my Android phone's contact book the other day when I accidentally deleted a few contact details. On a whim, I decided to check whether the Google Contacts website has an option to retrieve them. Thankfully, it does.

Go to contacts.google.com and log in using your Google account details. Now click More at the bottom left, then click 'Restore contacts'. Finally, select a point in time from which to restore your

> contacts (see screenshot below), then click Restore. When that's done, you'll see a message at the bottom saying that your contacts have been restored.

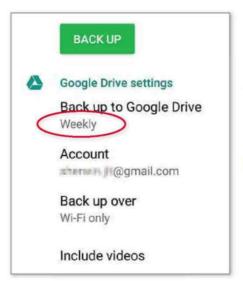
> > Calum Taylor

Phone and Tablet Tips Brilliant things to do on your device

ANDROID

Back up your WhatsApp conversations to Google Drive

WhatsApp Messenger has been making a lot of headlines recently. First, it dropped its 69p yearly fee and then earlier this month announced it has one billion users, making it the world's most popular messaging app. Its latest Android update (www.snipca.com/19544) lets you back up your conversations and media files (photos and voice notes) to Google Drive. This is extremely useful if you're switching to a new phone or formatting your old one, because it means you can then reinstall WhatsApp and retrieve all your conversations and files on your new or formatted phone.



To do this, first ensure you are connected to a Wi-Fi network. Now open WhatsApp, tap the three dots at the top right, Settings, 'Chats and calls', then 'Chat backup'. Next, tap 'Back up to Google Drive' and select how regularly you want to back up (we recommend Weekly - see screenshot below left). Next, select your Google account. On the 'Chat backup' screen, ensure the 'Back up over' section is set to 'Wi-Fi only'. Tick 'Include videos' at the bottom (optional), then tap the green Back Up button.

Now, on your new or formatted phone, install and open WhatsApp. You'll be prompted to restore your messages and media files by selecting your Google account. Tap Next to see all your WhatsApp conversations. Your media files won't appear immediately within your conversations because they download in the background, but you should start seeing them after a few minutes.

ANDROID & iOS

Use Google Calendar's new autosuggest options



Google's Calendar app has been updated and now includes Smart

Suggestions. Previously, you had to type in full all your event details (description, time, location and so on). Now, whenever you start typing, you'll see automatic suggestions in a list, making it easy to add detailed event information quickly. Open

← Add alarm

6:00 am



the Calendar app, tap the new '+' button at the bottom right, then tap Event. Now tap the 'Enter title, times, people, places' field at the top and start typing details of your event.

For example, type dinner with. You'll automatically see relevant names from your contacts list as you start typing. Select the correct option, then type on and you'll see date options. Select the date, then type at and start typing the name of the place or venue to see a list of relevant suggestions (see screenshot above).

Google Calendar is versatile, so you can also add the relevant details of your event in a different order to that detailed above. For example, you can simply type dinner at X with X on X. Next, tap Done at the top right to add the event to your calendar.

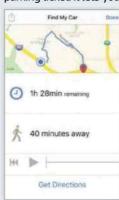
Best New Apps

What you should install this fortnight

QuickPark

iOS: www.snipca.com/19546

QuickPark will help you avoid getting a parking ticket. It lets you save your parking



spot as a 'pin' on a map and enter how much time you have left before your parking ticket expires. The app then alerts you when the expiry time is approaching and directs you to your car.

Mimicker Alarm

Free

Android:

www.snipca.

com/19547

Microsoft's new alarm app will ensure you don't nod off again because to turn it off you need to 'mimic' the action requested by the

app. For example, take a 'selfie' photo with a specific facial expression (happy, sad, etc), photograph a household object of a specific colour, or say a tongue twister.

CANCEL

Playcast £3.09

Windows Phone:

www.snipca.com/19548

Until now you couldn't 'cast' content from your Windows Phone to your TV. Playcast is the first app that lets you do that. You can stream your music playlists to your Chromecast or Apple TV and even view your device's photos and videos.

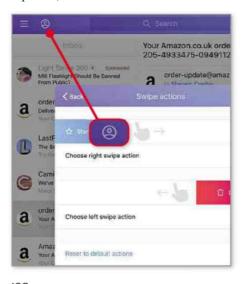


iOS

Customise Yahoo Mail's swipe actions

If you use Yahoo Mail and have an iOS device, we recommend you install the Yahoo Mail app (www. snipca.com/19545), which looks and works better than the website. It lists emails in your inbox on the left with a preview section on the right. By default, swiping left across an email in the list lets you delete it and swiping right across one gives you the option to 'Mark it as read/ unread'.

The latest app update lets you customise what the right and left swipe actions do. Tap your account icon (see screenshot below), Settings, then select 'Swipe actions'. You'll see your default actions. Now tap 'Choose right swipe action' and select one of the six actions listed: Delete, Archive, 'Mark as read/ unread', 'Star/unstar', 'Mark as spam' and 'Move to'. Next, tap 'Choose left swipe action' and select another action of your choice. When you've finished, tap Back, then Done.



Stop Safari crashing on your iPhone

Recently, many iPhone users have had problems with the Safari browser crashing, mostly when they search for something using the app's URL field. Here are a couple of quick fixes you can try if you've experienced the same problem.

First, open Settings, Safari and tap the Safari Suggestions switch (to turn it off). Alternatively, try clearing your browsing cache. To do this, open Safari in your Settings, scroll down, tap 'Clear History and Website Data', then tap Clear.

WINDOWS PHONE

Add multiple weather tiles to your start screen

The Bing Weather app – Windows Phone's default - only displays the weather at your current location (both in the app and on the start screen tile). However, there's an easy way to add weather details for another location as a live tile on your start screen. First, open the app, then swipe to the right until your reach the 'favourites' section. Now tap the '+' symbol at the bottom, start typing the name of the place/city vou want to add, then tap the correct suggestion when it appears. You'll now see both locations (your current one and the one you just added) as tiles. To add the second location as a tile to your start screen, simply tap and hold the tile, then tap 'pin to start' (see screenshot right).



Games With Kids

What to play together on your phone and tablet

AGES 0-5

Pango Hide and Seek

79p www.snipca.com/19549 (Android) £2.29 www.snipca.com/19550 (iOS)

Your toddler will love the 15 colourful levels in this game, which include snowy mountains and African savannahs. They have to find Pango (who's hiding within the landscapes) and tap to find other objects, such as keys, hearts, leaves and balloons.

AGES 6-10

Twofold Inc.

£2.99 www.snipca.com/19551 (Android) £2.99 www.snipca.com/19552 (iOS)

In this puzzle, your kids will be given a specific challenge - for example, joining seven blue tiles by swiping through them. The challenges become harder with each round, forcing players to adopt new strategies.

AGES 11-16

*Horizon Chase - World Tour

Free www.snipca.com/19553 (Android) Free www.snipca.com/19554 (iOS)

Horizon Chase is a car-racing game from a bygone era - arcade-style. You get five free tracks, but it's worth paying £2.29 to unlock the full game. This removes the adverts and gives you access to 73 tracks, 32 cities and eight trophies.

*Contains in-app purchases







Make Windows Better

Clever tips for every version

WINDOWS 7, 8, 10 Add website shortcuts to your Taskbar



You're probably familiar with bookmarking websites in your

browser, but you can also 'pin' them to your Taskbar. By doing this you can access favourite sites from your Desktop with one click.

At the moment you can only do this in Internet Explorer (IE) and Google Chrome. First, open a website (in IE or Chrome). In IE, drag that website's tab to vour Taskbar until vou see a 'Pin to taskbar' message (see screenshot below). Release your mouse and you'll see a new Taskbar button featuring the website's icon. In Chrome, navigate to the website you want, click the three lines at the top right, move your cursor to 'More tools', click 'Add to taskbar', then click Add.

You can do this in Edge, Windows 10's default browser, but it requires a workaround. Open Edge, click the three dots at the top right, then click 'Open with Internet Explorer'. Now follow the same steps for IE.



WINDOWS 7, 8.1 Display subtitles in Windows Media Player



Windows Media Player (WMP) doesn't display video subtitles by

default. If your downloaded video doesn't come with subtitles, you can search for and download the relevant subtitle file (in the default .SRT format) from the internet for free. Just type the name of the film or TV shows alongside 'subtitles'. To ensure WMP plays your subtitle, make sure your video and its associated subtitle file are saved in the same folder.

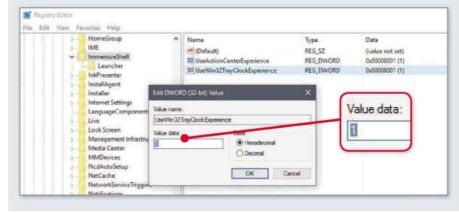
After doing that, play your video in WMP. Now click the 'Switch to Library'

WINDOWS 10

Switch back to the old clock in Windows 10

Microsoft has added a new pop-up clock to Windows 10. To see it, click the time on your Taskbar (bottom right on your screen). While earlier versions of Windows had a small calendar with a round clock on the right, Windows 10 has a larger calendar that shows the time at the top. If you prefer using the old clock. then there's an easy way to switch to it. Press the Windows key+R to open the Run dialogue box, type regedit into it, press Enter and click Yes to open your PC's Registry Editor.

Now navigate to the following Registry key by clicking the dropdown menus on the left: HKEY LOCAL MACHINE\SOFTWARE\Microsoft\ Windows\CurrentVersion\Immersive **Shell**. Right-click any blank area on the right, move your cursor to New, then click 'DWORD (32-bit) Value'. Name this UseWin32TrayClockExperience, then press Enter. Next, double-click this value, change the 'Value data' field from 0 to 1 (see screenshot), then click OK. Now close the Registry Editor and click the time in your Taskbar to see your old Windows clock. If you want to revert back to the Windows 10 clock, simply change the 'Value data' field back to 0.

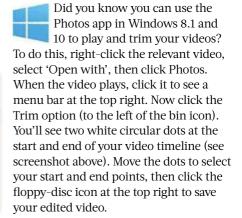


icon (three dots and an arrow) at the top right. Next, rightclick any area at the bottom of WMP (near the playback

controls) to bring up a menu. Move your cursor to Play, 'Lyric, captions and subtitles', then click 'On if available' (see screenshot below). Restart WMP and your video will now play with subtitles.



WINDOWS 8.1, 10 Trim your video quickly





Save your table templates to re-use in future



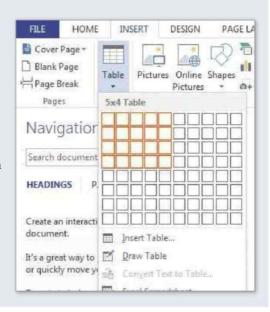
Creating tabulated charts in Excel can be a complicated process. It's much easier to

create basic tables in Word. If you tend to use the same table format again and again, then you should save its template for future use.

To create a table, click the Insert tab, then the Table dropdown menu at the top left, and select the rows and columns you want to use (see screenshot). You can also click Draw Table to create one manually, or click Excel Spreadsheet to add an Excel-style spreadsheet that you can click and drag to resize. Now add data to the table that you might want to reuse - column and row headers, for

example. The Design tab at the top lets you add different oneclick formatting styles to your table.

Once you're happy with your template, select it, click the Insert tab, then click the Table dropdown menu. Move your cursor to Quick Tables at the bottom, then click 'Save Selection to Quick Tables Gallery'. Name your template, give it a description, then click OK. The next time you want to reuse that template, click the Table dropdown menu, move your cursor to Quick Tables Gallery and select the table you added.

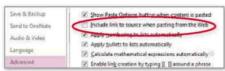


ONENOTE

Stop OneNote linking copied text to its original webpage

By default, whenever you copy text from a webpage and paste it into OneNote, the program adds a link to the original web address below your copied text. You can delete this URL, but if you copy and paste webpage content often, it's a good idea to disable this feature.

To do that, click File at the top left of One Note, then click Options. Next, click Advanced on the left, then untick the 'Include link to source when pasting from the Web' box (see screenshot below). Finally, click OK.



SWAY

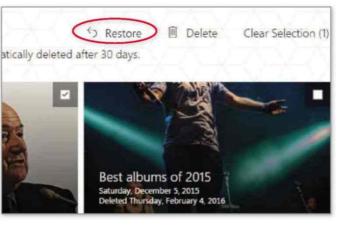
Restore presentations you accidentally deleted



📆 In January, Microsoft added new features to its online presentation tool Sway in

January. One of the most useful is the ability to recover any presentation you've accidentally deleted within the past month. Previously, there was no way to retrieve it.

Go to www.sway.com and log into your account to see your presentations as tiles. To delete one, click the three dots at the top right of its tile, click the bin icon,



then click Confirm Delete. To retrieve any deleted files, click the Recycle Bin option at the top right. You'll see all your deleted presentations. Tick the ones you want back, then click Restore (see screenshot above). To delete a presentation permanently, tick it, click Delete at the top, then click Delete again to confirm.

the left and click OK to insert it into your spreadsheet. Use the Chart Styles section at the top to format it.

To add additional information, move vour cursor over the chart, then click the '+' symbol at its top right (see screenshot below). You'll see the Chart Elements menu with various options

ticked (depending on the chart and style you selected). From here, you can tick more options such as 'Data table' to add data in a table. What's more, all these options are easy to customise. For example, move your cursor to Legend for options to change its position within your chart.

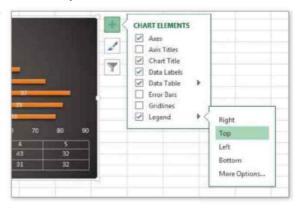
EXCEL Make your chart easy

to understand



Excel has some nifty hidden features that let you add data to

charts. To create a chart, select the data you want, click the Insert tab, then click Recommended Charts (in the Charts section). Now select one of the charts from



Secret Tips For...

Action Centre

Stop notifications in presentations, view old alerts and customise Quick Actions

Present without interruptions

Do you carry out presentations in PowerPoint? In Windows 10 you can use a setting to automatically disable Action Centre during your presentations, thus eliminating interruptions. Click Start, followed by Settings, then System followed by 'Notifications & actions'. Now scroll down to find 'Hide notifications while presenting' and switch it to On.

Silence all notifications

If you need a bit of hush to concentrate on something in Windows 10, then enable the Quiet Hours feature. Either rightclick the Action Centre's Notification



Scoll down this screen to disable alerts, or manage how they appear

Area icon and choose 'Turn on quiet hours' or, in Action Centre, click 'Quiet hours'. Action Centre will continue collecting your notifications. but it won't display them unless opened. Disabling Quiet Hours reverses these actions.

Choose your notifications

By default, Action Centre will inform you about... well, pretty much everything and anything. If you find this overwhelming, you can customise what's shown. In Windows 10, first open Action Centre, then click 'All settings', System, followed by 'Notifications & actions'. The switches under the Notifications heading (see screenshot left) are very broad controls. It's better to scroll down to the 'Show notifications from these apps' heading and then switch off notifications from specific apps.

If you want even more control, click an app's name to choose the types of notifications it displays, and whether they should be accompanied by an audible alert. There are fewer options



View Windows 7's archived Action Centre messages to help with PC troubleshooting

in Windows 7 but they're still worth a look. Open Action Centre and then click 'Change Action Centre settings'.

View past actions

If you're using Windows 7 there's a hidden way you can view previous actions and solutions. This can be helpful if you're trying to troubleshoot PC problems because you might just spot something that contributed to vour current plight. First, right-click the Action Centre icon then choose Open Action Centre. Now click the 'View archived messages' link in the left-hand pane. To find out more about a particular action, right-click its entry in the list that appears and choose 'View solution' (see screenshot above).

Disable the Action Centre icon

Are you short of space on your Windows Taskbar? In Windows 10 you can disable Action Centre entirely, removing its icon from the Taskbar – and stopping all alerts into the bargain. Click Start, followed by Settings, then System followed by 'Notifications & actions'. Next, in the right-hand pane, click 'Turn system icons on or off' then move the Action Centre switch to Off.

Launch Action Centre with a keyboard shortcut

Not every secret tip requires a detailed explanation. So here's a quick one for Windows 10 to finish: next time you want to open Action Centre, don't use your mouse - just press Windows key+A instead.

Customise the icons for quick actions

When you open Windows 10's Action Centre by clicking its icon in the Notification Area, you may have noticed the Collapse option. Click it and the Quick Actions panel shrinks to a strip of four icons - making space for more notifications above.

That's useful, but did you know you can customise the remaining icons to whatever you want? First, open the Action Centre and click 'All settings'. Next, click System, followed by 'Notifications & actions'. Now click an icon under 'Quick actions' and then choose its replacement from the list.



What's All the Fuss About...



Microsoft Research

The company wants to turn great ideas into great products more quickly

What is it?

Have a guess. In a rare outbreak of jargon-free clarity from the company, Microsoft's research division is called Microsoft Research (http://research.microsoft. com). Hallelujah!

Wait - Microsoft actually researches its products?

Now, now. Windows may not always work perfectly, but it's not through a lack of testing. Since Bill Gates set it up in 1991 Microsoft Research has grown to employ more than 1,000 researchers and engineers around the world, in cities including Cambridge, New York, Beijing and Munich. Projects involve all aspects of

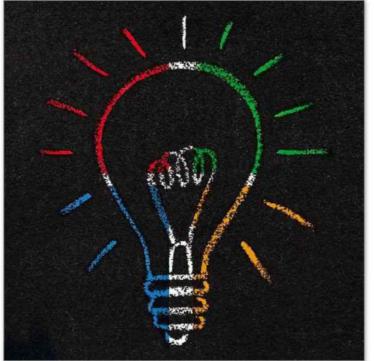
computing, from artificial intelligence to speech recognition. But things are about to change.

In what way?

Microsoft wants the research to lead to more products. The company's boss, Satya Nadella, thinks that in the past too much emphasis was placed on 'pure' research that wouldn't necessarily lead to anything concrete. Engineers were guided by a 'research for the sake of research' ethos, not always focusing on the end result - such as products that would make the company even more money.



Skype Translator is the result of a more efficient Microsoft Research division



What will actually happen?

Researchers will work more directly with the teams that build products. Until now researchers worked in isolation, protected from the commercial pressures of having to build products that would prove popular in the 'real' world. That started changing in February 2014 when Nadella was shown a translation tool Microsoft Research had built. Impressed, he gave the team a three-month deadline to make it work with Skype. It's now known as Skype Translator, and comes with the Desktop version of the program (www.skype. com/translator).

So we'll see inventions turned into products more quickly?

That's what Microsoft hopes. In the past too many good ideas were overlooked, giving rival companies the opportunity to launch products first. For example, back in 1998 the research team showed Bill Gates a program for making digital maps. Nothing came of it until, seven

years later, Gates saw Google Maps and ordered his engineers to create their own version within 100

Is Microsoft copying Google then?

Yes. Google's recipe for successful innovation is to make sure its researchers work closely with the teams building products. Google's management says that this makes it easier for them to spot an idea's potential, and then suggest ways it can be turned into a product people will want to use.

What are the dangers of this new approach?

Critics argue that research has to be given the freedom

to develop at its own pace, allowing for happy accidents along the way. They fear that a more disciplined approach may stifle creativity, leading to a short-term vision that will actually result in less innovation. However, Microsoft Research had earned a reputation for developing technology that was fascinating, often groundbreaking, but ultimately pointless. It looked great in a laboratory, but was never likely to appear in a person's home. It's widely accepted that a change was needed.

How will I benefit?

Hopefully by getting your hands on better products sooner. In fact, that's already happening. As well as Skype Translator, better collaboration has led to products such as Cortana and the holographic headset HoloLens (www.microsoft.com/ hololens). But we'll know that a new era has dawned only when the teams work together to release a tool that helps users block Microsoft's incessant Windows 10 upgrade messages. At least Google can't beat Microsoft to that one.



Why is Microsoft watching everything you do in Windows 7, 8.1 and 10?

And what can you do to prevent it? Windows expert **Jonathan Parkyn** investigates

WHAT YOU CAN DO

- Discover what personal info Microsoft is collecting
- Find out what Microsoft does with your personal data
- Protect your privacy by turning off Windows 10's hidden settings
- Disable Microsoft's tracking tools in Windows 7 and 8

f you're upgrading from Windows 7 or 8, Windows 10 doesn't cost you any money. But there is a big hidden cost to Microsoft's free operating system (OS): your privacy. Concealed within Windows 10 are numerous options that give the operating system permission to record a variety of information about you and the way you use your PC - including what you search for online and anything you type on your keyboard. All this is then sent back to Microsoft for analysis. What's worse is that most of these options are enabled by default. So, unless you take action, you could be unwittingly handing your private data to Microsoft on a plate.

Windows 7 and 8 users aren't safe from from Microsoft's snooping. The company recently added similar tracking abilities to those systems. So even if you've decided against upgrading to Windows 10, you won't be able to avoid Microsoft's prying eyes.

Until recently, Microsoft has seemed to be relatively respectful of its users' privacy, so what has changed? What types of information is the company now gathering? And what does it do with your data once it has got it? We'll answer these questions and more, and show you how to protect your privacy, whatever version of Windows you're using.

YOUR PRIVACY QUESTIONS ANSWERED

What exactly is Microsoft doing?

It's using tracking tools built into Windows 10 to monitor users' activity. This data is then sent back to Microsoft. But that's not all. Windows 10 contains other privacy-eroding features that target you with adverts; log what buttons you press on your keyboard (your 'keystrokes'); and consume your internet bandwidth.

Microsoft provides ways to disable most of these, but they're scattered throughout the OS, making them difficult to find. And you *will* need to find them because most of Microsoft's snooping options are enabled by default. You'll need to opt out if you want to protect your privacy. We'll be showing you where to look and what to do from page 53.

Why is this so controversial?

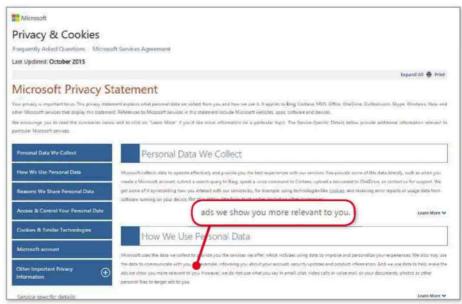
While some of us now grudgingly accept that online services (Google, for example), and our mobile devices, collect our data, never before have we been in a situation where our own computers routinely spy on us and gather personal information on such a massive scale. It has made lots of people feel very uncomfortable.

To give Microsoft credit, it has been transparent about its data collection. But the company has made it unreasonably difficult for users to do anything about it. Not only that, but Microsoft also recently admitted that Windows continues to track PC activity, even when users have disabled the buried tracking options - more on this later.

What information is Microsoft collecting?

Prepared to be shocked. Microsoft can gather your name, demographic info (age, gender, language), interests, relationships and PC usage. But what's most unsettling is that Microsoft gathers something it ambiguously calls "content". This can refer to almost anything, including private files and emails.

By default, Windows 10 gathers data as you browse the web and use Desktop apps. It uses this to build a profile of you that is then used by Microsoft and other third-party companies to target you with advertising. It also tracks your location, keeping a record of where you've been and gathering information about the networks you connect to. And, unless you tell it not to, it even shares your private home Wi-Fi password.



In its privacy statement Microsoft admits that it collects your data in order to show "more relevant" adverts

The OS gathers other info to make certain tools work. For example, Cortana records your keystrokes and spoken commands. It can also access your calendar and contacts as well as find out what you buy online. All this is stored online - or "in the cloud", as Microsoft puts it.

Windows 10 and Windows 8 automatically synchronise your settings and data with the cloud. This may not sound terrifying, but it does mean that you need to opt out if you don't want information about you stored online.

Should I be worried about it?

Some of Microsoft's data-collection actions obviously pose more of a risk to your privacy than others, which is why we've given each of our tips (from page 53) their own urgency rating. In general, however, your level of concern is likely to fall roughly in line with the level of trust you have in Microsoft as a company.

In a lengthy Privacy Statement (www.snipca.com/19521, see screenshot above), Microsoft states that it will "access, disclose and preserve personal data, including your content" – such as your emails or private files and folders – "when we have a good faith belief that doing so is necessary". This effectively gives Microsoft the right to access and share your private files and data with anyone it likes, should it wish to.

To help reassure users, Microsoft gives some examples, such as when it may

need to access or share your data in order to "comply with law enforcement or other government agencies" or "maintain the security of our services". It's somewhat perturbing to consider that "good faith" is the only thing standing between you and a situation where the contents of your personal files are being viewed, copied and handed over to unknown third parties.

There's also the growing risk of hacking to consider. Even if Microsoft itself isn't going to abuse your data, what's to stop it being stolen from the company's servers via a cyber-attack?

Why is Microsoft doing this?

In its Privacy Statement, Microsoft says that it collects data "to operate effectively and provide you the best experiences with our services", as well as "to send communications, including promotional communications" and, finally, "to display advertising". It admits that it uses some data to make adverts "more relevant" to you. One way this could work is by tracking which apps you use, then 'recommending' others that are similar.

It's true that some aspects of the OS simply won't work unless you're prepared to put up with a certain amount of tracking. For example, you won't be able to check your current whereabouts in the Maps app if you've turned off location tracking. And you won't be able to get suggestions from Cortana if you block it from monitoring your activity.

What's Microsoft really up to?

We're not going to suggest that there's anything profoundly sinister lurking behind Microsoft's motivations. But for all its talk about how "your privacy is important to us", we're convinced that its real motivation boils down to one thing: money.

By giving away Windows 10 for free, Microsoft has lost a very valuable source of revenue. It's only natural that the company should look for alternative ways to make money. Google, which recently reported record profits, has proved that companies can generate vast amounts of revenue from advertising while providing free services to its users. Microsoft wants some of that action. That's why every Windows 10 user is allotted a unique advertising profile and why there's so much advertising embedded within the OS and its related services. It would also explain why the company is being so pushy about getting everyone to upgrade to the new OS.

Collecting and using people's data is something that mobile operating systems - such as Apple's iOS and Google's Android - have been doing for years, so Microsoft is just catching up with other tech companies. But that doesn't make it any more palatable.

Microsoft has come under fire from all sides, with the campaign group European Digital Rights (EDRi) neatly summarising criticism of the company's privacy policies in a recent blog post: "Microsoft basically grants itself very broad rights to collect everything you do, say and write with and on your devices in order to sell more targeted

advertising or to sell your data to third parties. The company appears to be granting itself the right to share your data either with your consent or 'as necessary'." Read the full post at www.snipca.com/19522.

Can I completely stop Microsoft snooping?

The tips we're about to provide will block most of Microsoft's data-collecting tricks. However, Microsoft's Corporate Vice President Joe Belfiore revealed in an interview last October that some data-collecting tools in Windows can't be disabled (read the full interview at www.snipca.com/19519).

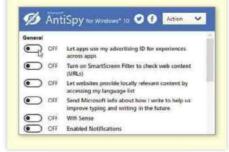
Microsoft records something it calls 'telemetry' - diagnostic data about how you use your PC - though it's unclear what this data actually is. Belfiore claims it is only "to do with the health of the system" and doesn't contain personal information. But in an unrelated announcement in January trumpeting Windows 10's success

(www.snipca.com/19520), Corporate Vice President of Microsoft's Windows and Devices Group Yusuf Mehdi revealed just how much the company knows about what its users have been doing with their PCs, including the number of photos viewed using the Windows 10 Photo app (82 billion) and how many hours of Xbox One games were streamed to Windows 10 PCs (6.6 million). This suggests that Microsoft may be collecting much more than merely how often your PC crashes

Thanks to a backlash from its business customers, Microsoft recently provided a

USE FREE PRIVACY TOOLS

As well as following our advice in this feature, you should try one of the many third-party privacy tools that have sprung up since Windows 10 launched. Though these rarely offer anything more than is already built into Windows 10, they do display all the major privacy options in one place, making your life easier. The problem is that some of the tools install unwanted software, which is actually worse for your privacy. However, Ashampoo's free AntiSpy for Windows 10 (www. snipca.com/19534) is safe to use. In fact, it's a portable program, which means you don't even need to install it. Just run the tool and choose which privacy options to disable or enable, based on our advice in this article.



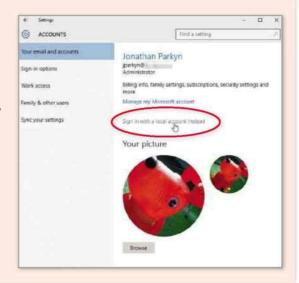
way for users of the Enterprise Edition of Windows 10 to disable telemetry collection but, sadly, the company has no plans to introduce a similar option for Windows 10 Home or Pro users.

Windows 7 and 8 include similar telemetry tracking abilities, but thankfully you can disable these. See page 55 to find out how.

MICROSOFT ACCOUNTS: SHOULD YOU USE ONE?

The default user account type in Windows 8 and 10 is a Microsoft account. You may already have one of these (from a Hotmail or Outlook. com email account, for example) or you may be prompted to create one when you first log in. The key benefits of using it include the ability to make purchases (and download free apps) from the Windows Store, synchronise your settings and passwords with other PCs, and sign into other Microsoft services. But because vour account is online. Microsoft knows whenever you're using your PC. So one way to make Windows 8 and 10 more private is to use an

offline-only Local account instead, similar to the user accounts used in Windows 7. This won't be ideal for everyone - you won't be able to use the Windows Store if you do this and, in truth, the privacy risks of sticking with a Microsoft account are relatively low. But if you're uncomfortable with your Microsoft account, switch to a Local one. In Windows 10, click Start, Settings, Account, then click 'Sign in with a local account instead' and follow the prompts (see screenshot). In Windows 8.1. click Start, type account, then click 'Your account settings'. Click Disconnect and follow the prompts.



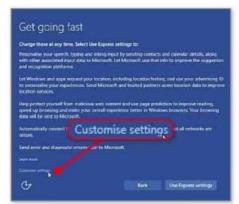
PROTECT YOUR PRIVACY IN WINDOWS 10

Here's how to disable all of the snooping features Microsoft has built into its latest operating system.

Don't use Express settings Urgency level: Very high

During the Windows 10 upgrade process, Microsoft sneakily glosses over a very important part in the procedure. It uses misleading wording to trick you into agreeing to a load of default settings – many of which potentially compromise your privacy. By choosing this 'Use Express setup' option when prompted, you'll shave a few minutes off your setup time. But you'll also be allowing Microsoft to collect personal data from your contacts and calendar.

If you've already upgraded to Windows 10, it's too late to change this. Instead, you'll need to switch off each tracking tool individually – follow our tips below. But if you've not upgraded, when you do so just click the tiny 'Customise settings' link on the 'Get going fast' screen to disable most of Windows 10's snooping features (see screenshot below).

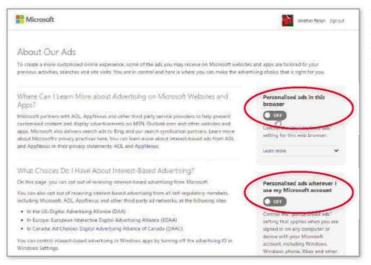


Protect your privacy by clicking the tiny 'Customise settings' link when upgrading to Windows 10

2 Disable targeted advertising Urgency level: High

Advertising has become an unavoidable part of modern computing, but Windows 10 goes much further than previous versions. You'll not only see adverts on web pages, but also within apps and even in your Start menu.

You can't turn off advertising completely, but you can stop advertisers from using information about you to target you with personalised ads. To do so, click Start, Settings, then Privacy. Click General on the left, then switch off 'Let apps use my advertising ID for experiences across apps'. While you're



Turn off these settings to stop Windows 10 targeting you with "personalised adverts"

there, also switch off 'Let websites provide locally relevant content by accessing my language list'.

You'll need to change settings elsewhere too. Click 'Manage my Microsoft advertising and other personalisation info' to be taken to Microsoft's About Our Ads web page (www.snipca.com/19455). Sign in with your Microsoft account, then switch both 'Personalised ads in this browser' and 'Personalised ads whenever I use my Microsoft account' to Off (see screenshot above).

To block Start menu adverts, click Start, Settings, Personalisation, then Start and switch off 'Occasionally show suggestions in Start'. Finally, open the Windows Store app, click on your account and choose Settings. Here, switch off 'Show products on tile' if you'd rather not see adverts in the Store's Start menu Live tile.

Block location tracking Urgency level: Medium

If you don't like the idea of people knowing where you are and where you've been, click Start, Settings, Privacy, then Location. The settings you need to change here depend on what type of device you're using and the services you want to use. If you're using a standard desktop PC, for instance, there's no real benefit to having Location switched on at all, as the PC is fixed in one place. To plan journeys in the Maps app, you can always just use your postcode instead.

To disable Location altogether for anyone who uses the PC, click Change, then turn it off. To turn it off for individual user accounts, click the switch under Location to Off. To erase location data, click Clear under 'Clear history on this device'.

If you're using a laptop - or a Windows phone or tablet - Location can be pretty useful for navigating, so you may wish to leave it on. But if you do, scroll down on the Location settings page and disable any apps you don't want tracking you under 'Choose apps that can use your location'. Almost all can be safely switched off.

4 Stop apps watching and listening

Urgency level: High

Giving apps permission to use your device's camera or microphone means that they could spy on you. They could even record your voice and take video footage of you. By default, Windows 10 lets apps use your camera and microphone, so to change this, click Start, Settings, Privacy, then either Camera or Microphone. The setting at the top of both pages turns off the camera and microphone for all apps, but you may not wish to do this - Skype, for example, won't work if it can't access the microphone or camera. Instead, turn off individual apps listed under 'Choose apps that can use your camera/microphone'.



Why does the 'Food & Drink' app need access to your camera? Simply turn it off

active

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5 Disable Windows 10's keylogger

Urgency level: Very high

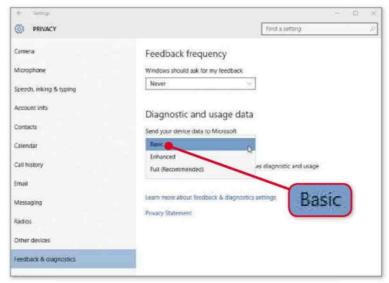
We've been warning readers about the dangers of keyloggers - tools that record what you type on your keyboard - for years. So it's astonishing that Windows 10 should come with one built-in. Microsoft claims it's there to help improve services and provide you with a more personalised experience, but we think it's just plain creepy. First, click Start, Settings, Privacy, General, then switch off 'Send Microsoft info about how I write to help us improve typing and writing in the future'.

Once you've done that, click 'Speech, inking and typing' on the left, then click 'Stop getting to know me' on the right. This will stop Windows (and Cortana) collecting data from spoken commands and handwriting (on devices that support this), as well as from what you type. It'll also disable Cortana, and stop the voicedictation tool from working. Click 'Turn off' in the warning message if you're happy with this.

Stop Cortana storing your data online

Urgency level: High

For all of Microsoft's fanfare about Cortana, it's hard to ignore the fact that Windows 10's digital assistant is a privacy nightmare. Even if you disable it using the previous tip, Cortana will continue to store detailed personal information about you on Microsoft's servers unless you opt to delete it. To do so, click Start, Settings, Privacy, then click 'Speech, inking and



Select 'Basic' to limit Microsoft's 'telemetry' tracking

typing'. Under 'Manage cloud info', click 'Go to Bing and manage personal info for all your devices'. This will open a web page - sign in with your Microsoft account, then scroll down to 'Other Cortana Data and Personalised Speech, Inking and Typing' and click Clear (see screenshot below).

Block apps from accessing your private info

Urgency level: Medium

Windows 10 allows apps to access a wide variety of different personal data – from your calendar and contacts to emails and text messages. To stop this, click Start, Settings, Privacy, then click 'Account info', Contacts, Calendar, 'Call history', Email and Messaging in turn. In each case (apart from Contacts) you'll see a main switch at the top of the page allowing you

to turn off access completely.

However, as with Camera and Microphone, you may find that doing this prevents certain apps and tools from working properly. The Mail app, for example, needs to have access to your calendar, contacts and, of course, email. So, instead of disabling app access altogether, it's better to leave the top switch on in each case, then choose which apps to allow or disable from those listed below.

Limit Microsoft's telemetry tracking

Urgency level: Medium

It's not possible to turn off all of Microsoft telemetry tracking in Windows 10. But you can customise it to limit the amount of data you share, and to stop Windows nagging you for feedback. Click Start, Settings, Privacy, then click 'Feedback & diagnostics' on the left (you may need to scroll down if you can't see it). On the right, select Never from the 'Windows should ask for my feedback' dropdown menu, then select Basic from the dropdown menu under 'Send your device data to Microsoft' (see screenshot above).

PERSONAL INFO Clear personal information Saved places To view and manage your saved places, go to Bing Maps. Search history To view and manage your search history, go to the Search History page Other Microsoft services OneDny These are some other Microsoft se ave information you provide. To learn more Microsoft Advertising nce, see the Cortana and Eing Privacy Other Cortana Data and Personalised Speech, Inking and Typing

Click 'Clear' to delete the data that Cortana stores on you

Stop Windows 10 sharing your Wi-Fi password

Urgency level: High

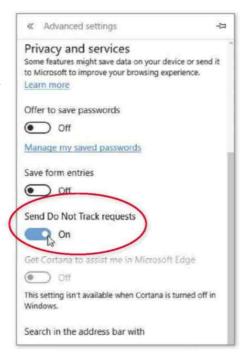
Windows 10 comes with a new feature called WiFi Sense, designed to let friends and colleagues quickly connect to each other's wireless networks without having to physically enter a password. In practice, what happens is that Windows shares an encrypted version of your private Wi-Fi security key with anyone in your contacts list. Others can't see your key, but the system does mean that contacts you don't really know or trust

could end up with the ability to access your Wi-Fi when they're in the vicinity. Not only that, but your encrypted Wi-Fi key is stored on Microsoft's servers, leaving it vulnerable to hackers. To switch WiFi Sense off, click Start, Settings, 'Network & internet', then WiFi. Scroll down and click 'Manage WiFi settings'. Under WiFi Sense, make sure both options are set to Off.

Configure Edge's privacy options

Urgency level: Medium

Microsoft's new web browser has its own set of privacy settings that need addressing. Click the menu (three dots) button in the top right and choose Settings, then 'View advanced settings'. Scroll to 'Privacy and services'. Leave 'Offer to save passwords' and 'Save form entries' enabled only if you are comfortable with the browser storing this information. We recommend enabling 'Send Do Not Track requests' to limit the amount your online activity is tracked (see screenshot), and disabling 'Get Cortana to assist me in Microsoft Edge' (though this may already be disabled if you've switched Cortana off).



Enable 'Send Do Not Track requests' to limit how much information Edge sends to Microsoft

It's convenient to leave enabled 'Show search and site suggestions as I type' and 'Use page prediction to speed up browsing'. But it will mean data about your searches and browsing being

CAN YOU BE ANONYMOUS IN EDGE?

Like most browsers Edge has a private mode. Called InPrivate (instructions at www.snipca.com/19559), it lets you browse the web anonymously, so you don't leave a trail containing your browsing history, image cache or cookies. This prevents other users of your PC from seeing what you've done online. However, evidence recently uncovered by researchers at website Forensic Focus (www.forensicfocus. com) suggests that anyone with the right know-how and access to your computer could easily reconstruct your InPrivate browsing history via data stored in your user account's WebCache folder. Microsoft has since admitted it is aware of the flaw and is "committed to resolving this as quickly as possible".

sent to Microsoft. Under the Cookies section, we'd suggest selecting 'Block only third-party cookies', but bear in mind that this will stop some sites working properly.

PROTECT YOUR PRI

Stop CEIP from snooping

Windows 7 and 8 also snoop on you. Microsoft collects info on how you use your PC for its Customer Experience Improvement Program (CEIP). Microsoft claims that the data doesn't contain any identifying information, such as

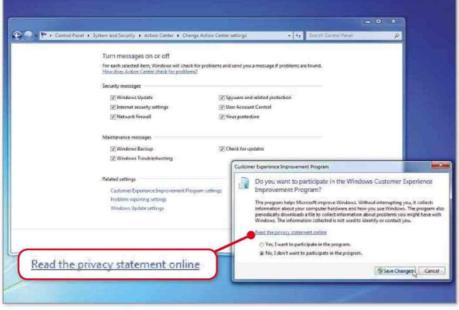
your name, address or phone number vou can read more about CEIP at www. snipca.com/19537.

The big difference in Windows 7 and 8, compared with Windows 10, is that you can opt out of this data collection at any time. To check whether it's enabled

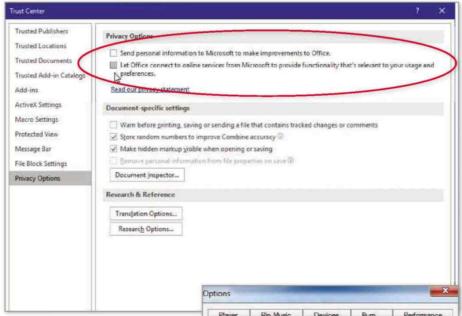
on your PC, click Start, type action and click Action Center. Now click 'Change Action Center settings', followed by 'Customer Experience Improvement Program settings'. In the Window that opens, make sure the 'No, I don't want to participate in the program' option is selected and click Save Changes, if necessary (see screenshot left). Turn to page 48 for more tips on Action Centre (we're spelling it in UK-English!).

Disable Microsoft's new tracking updates in 7 and 8

Microsoft recently introduced further snooping abilities into both Windows 7 and 8 via a slew of Windows updates. Looking through the update codes on Microsoft's Knowledge Base (www. snipca.com/19543) reveals that they are related to "customer experience and diagnostic telemetry". If your PC is set to update automatically, then these may already have been installed on your system and be reporting back to Microsoft. The good news is that disabling CEIP (see workshop on opposite page) will effectively block these. However, to be certain, you may want to follow the



Select 'No, I don't want to participate in the program' to opt out of Microsoft's CEIP



Untick privacy boxes in Office to stop Microsoft tracking your use of the software

steps below to check whether any of the offending updates have been added to your system, then remove and block them if desired.

Disable CEIP in other programs

Microsoft includes CEIP and similar tracking tools in other products, so you may want to turn these off too. In Microsoft Office, for example, click File, Options, Trust Center, 'Trust Center settings', then Privacy Options and untick any options that refer to Customer Experience or sharing data with Microsoft - the precise wording depends on your version of Office (see screenshot top).

If you use Windows Media Player, click Organise, Options, Privacy, then untick 'I want to make Microsoft software and services even better... and click OK (see screenshot above). And if you use Microsoft Security Essentials (Windows 7) or Windows Defender (Windows 8), you may also want to disable the Microsoft



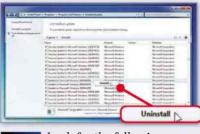
Untick this box to stop Microsoft knowing how you use Windows Media Player

Active Protection Service (MAPS), a similar system to CEIP, which reports information about your PC usage - including browsing history - to Microsoft. Open Security Essentials or Defender and click Settings, MAPS, select 'I don't want to join MAPS', then click 'Save changes'.

Uninstall and block Microsoft's tracking updates



STEP Click (or right-click in Windows 8.1) Start and select Control Panel, then click 'Uninstall a program'. On the left, click 'View installed updates'.



Look for the following updates (you can use the Search box): KB3022345,

KB3068708, KB3075249 and KB3080149. Right-click each, select Uninstall, then click Yes. Restart your PC.



STEP Open Windows Update and click 'Check for updates'. Click the 'important

updates' link, then right-click the KB numbers from Step 2 and select 'Hide update' for each.

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Windows 1 settings Your questions answer

You're keen to change Microsoft's defaults, but you have a few questions first. Windows expert Ionathan Parkyn provides the answers

ur Cover Feature in Issue 466 (see image right) shed light on the multitude of settings and hidden options in Windows 10, and offered advice about whether to accept or



change Microsoft's defaults. We received hundreds of emails from readers telling us how useful they found it, but there were also lots of questions about our recommendations, which we're happy to answer here. If you have further Windows 10 problems, email us at noproblem@ computeractive.co.uk and our Problems Solved team will consider them for future publication.

Why can't I access Microsoft's personalised ad settings?

In your advice concerning the settings for 'Personalised ads', there seems to be a problem with the website you suggest we visit: http://choice.microsoft. com. I have tried it on different browsers but have not been able to access it. Is there an alternative?

David Dve

We also had problems Accessing it for about a week after Issue 466 went to press. Perhaps Microsoft took it offline for some reason. It seems to have reappeared now, but if

you still can't access it at the address provided, try this alternative address: www.snipca.com/19455. It will redirect you to Microsoft's website, though you may then need to log in using your Microsoft account details before you can access the settings themselves.

Why can't I change my default PDF viewer?

In your settings feature you suggest clicking 'Choose default applications by file type' to change default apps in Windows 10. However. this does not seem to work with PDF files. I tried Acrobat Reader and others but, no matter what I do, it changes back to using Microsoft Edge as the default PDF viewer. Can you help?

Dave Ingram

Select As Default PDF Ha

Click Select As Default PDF Handler in Acrobat Reader to make it your default PDF program

Yes, hopefully. Your PDF problem is a strange Windows 10 quirk that other readers have also experienced. First, try right-clicking a PDF file, then selecting 'Open with', then 'Choose another app'. Select the program you want from the list, then tick the box next to the 'Always use this app to open .pdf files' option at the bottom of the box, before clicking OK. If that still doesn't work, launch Acrobat Reader, then click Edit, Preferences, General. At the bottom of the window, click Select As Default PDF Handler. Click Yes, then OK.

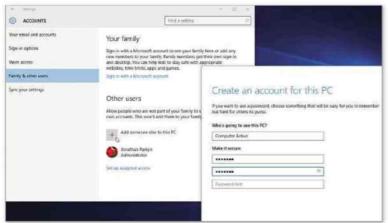
Why does my Start button no longer work?

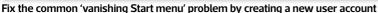
I changed most of the settings you recommended in Issue 466. On restarting my computer, however, I discovered that left-clicking the Start

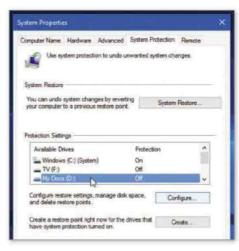
> button did nothing. I could right-click it, but the Settings button and all the tiles had disappeared. Also, the internet and Mail icons have disappeared from the Taskbar. How do I fix all this?

> > **Dennis Pasco**

The problem you describe Ais widely known to affect Windows 10, seemingly at random. The simplest fix is to create a new user account. Right-click Start, select Control Panel, User Accounts, then 'Add or remove user accounts'. Next, click 'Add a new user in PC







You can enable other drives in System Restore, but in most cases there's little point

settings', then 'Add someone else to this PC' and follow the remaining steps (see screenshot above). Once the account has been set up, click 'Change account type', select Administrator then click OK. Log in using this account and your Start menu should be back. You'll need to copy your personal files from your old account and re-apply any other settings, but your apps and programs should be unaffected.

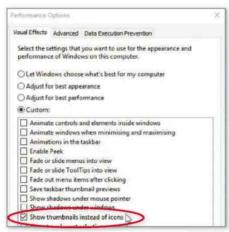
Why have my thumbnails turned into icons?

I followed your instructions about changing the Visual Effects setting to 'Adjust for Best Performance', but it turned every photo into a red icon. What has happened to my photo files?

Ralph Mynn

Nothing has happened to them - they Aare safe. It's quite normal for photos to revert to icons if you choose the 'Best Performance' option. Doing so disables thumbnails, meaning that your photos and other files will be displayed as icons in the default programs they open with, rather than as a miniature preview of the image itself.

Thumbnails are useful for identifying



To leave thumbnails enabled in Visual Effects tick 'Show thumbnails instead of icons'

images, but they're cached in your PC's memory and stored on your hard drive, so disabling them is one way to free up system resources and boost performance. If you prefer to leave thumbnails on, however, choose the Custom option in the Visual Effects screen, then untick all the options below, except 'Show thumbnails instead of icons' (see screenshot below left).

Can I set up an alternative drive to store data?

In your feature you said that Windows 10 disables System Restore. As far as I can tell, this is incorrect. However, while following the procedure vou recommended, I came across other options, such as being able to set up an alternative drive for storing the restore data. Could you explain how to do this?

John G Steel

Sadly no, because it's not actually Apossible. Clicking a different drive, then clicking Configure will enable System Restore protection for that other drive, which isn't much use because it's only usually necessary to enable System Restore for the drive with Windows installed.

In our experience, Windows 10 does leave System Restore disabled by default, but it's possible that on some systems, including yours, it is turned on. We'll keep checking this in future. As we explained in the feature, it's easy enough to re-enable. Right-click Start, select System, then click 'System protection'. In the window that opens, click your system drive (usually C:) then Configure. Click 'Turn on system protection', then OK.

Why can't I start Windows 7 after rolling back from 10?

I changed my Windows 10 settings as you suggested in Issue 466. However,

I still didn't like the operating system, so I decided to go back to Windows 7. The problem is that now Windows 7 won't start. It lists a 'StartupRepairOffline' problem with the number '6.1.7600.16385' and 'NoRootCause' listed as problem signature codes. What has happened? Steve Dinsdale

None of the changes we suggested would have resulted in the situation you describe. The most likely explanation is that some of Windows 7's startup files have somehow become corrupted during the rollback process.

There are a few things you can try to fix this. Grab your Windows 7 installation DVD (or borrow one), then start your PC with the disc in the drive. Press a key to boot from the DVD when prompted. On the Install Windows screen, select your language preferences, click Next, then click 'Repair your computer'. You should see your Windows 7 installation listed. Click it, then click Next. From the Recovery Options listed, first try Startup Repair – your error message suggests that Startup Repair was unable to fix the problem, but running the tool multiple times sometimes solves this, so attempt it at least five times before moving on.

If you still can't start Windows 7, boot to the Recovery Options again and this time click System Restore. Click Next, select a restore point, then click Next, followed by Finish. This may restore the corrupt files. If it doesn't and you have a system-image backup made before you upgraded to Windows 10, you can restore this by attaching your USB stick, booting to the Recovery Options, choosing System Image Recovery and following the instructions. If you don't have a systemimage backup, you may need to reinstall Windows 7 from scratch, though doing this will erase everything on your hard drive, so it's very much a last resort.

NirSoft's Best orograms (and they're ALL free!)

You're spoilt for choice on NirSoft's superb website - it's packed with dozens of simple but clever free programs. Patricia Walsh picks the 10 best

ver the past few years one website has made repeated appearances in our Best Free Software section: NirSoft (www. nirsoft.net). It's home to an impressive range of Windows programs that carry out the sort of 'boring but useful' tasks that make using your PC so much easier. And incredibly, it's the work of just one man (see box on page 61).

We've spent some time testing the 100-plus programs on the site and whittled it down to our top 10. Most of these are small (typically less than 100KB) and portable, so they don't need to be installed. They all work with XP, Vista, 7, 8 and 10 except ProduKey. Best of

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Press Shift and right-click to bring up Windows Explorer's 'context' menu in RecentFilesView

all, they're free, contain no junk and require no email registration. Here's our countdown...



Many of NirSoft's tools add the kind of features to Office and Windows that we wish Microsoft had thought of. OutlookAddressBookView is a good example. It shows you at a glance the important details of contacts stored in your Microsoft Outlook address book, giving you quick access to phone numbers, postcodes and email addresses. By default, it shows details from any contacts in your default Outlook profile. You can select other profiles by clicking Options, then Advanced Options, or by pressing F9 on your keyboard.

RecentFilesView www.snipca.com/19526

Every time you open a file, Windows saves its name in the 'Recent' folder or in the Registry. This information is displayed by RecentFilesView, showing you instantly where to find it. Click 'Modified Time' at the top to see them listed chronologically based on when you last amended each file, or 'Created Time' to see them in the order you created them.

A recent update added the same right-click options you get in Windows Explorer's 'context' menu, such as 'Create shortcut' and 'Send to' (see screenshot left). Just select a file then, while holding down Shift on your keyboard, right-click your mouse.



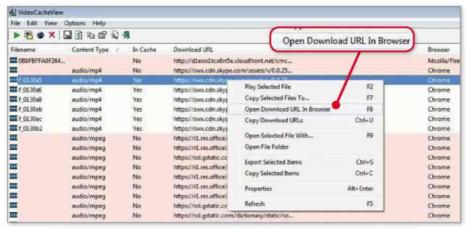
Knowing what caused your PC to crash should help you avoid the problem in future. That's where LastActivityView can help. It lets you retrace your footsteps by displaying a list of actions performed on your PC, and events that took place immediately prior to a crash. You'll see when you logged on/off, when you ran software, when a system restore point was created and when you saved a document. Obviously, it's also a useful way to keep an eye on how other people are using your PC.

BlueScreenView www.snipca.com/19486

Here's another tool to help you investigate the cause of a crash. It scans the 'minidump' files that Windows creates during those dreaded 'blue screen of death' disasters, then presents them in a neat table. The upper pane lists each crash; the lower pane shows the corresponding driver that was loaded and possibly caused the crash. Visit Microsoft's Support website for more information on how to understand Windows dump files: www.snipca. com/19530.

VideoCacheView www.snipca.com/19484

Using VideoCacheView you can save video files in your hard drive. It works by scanning your entire browser cache for videos you've recently watched online. These can then be saved to your PC for

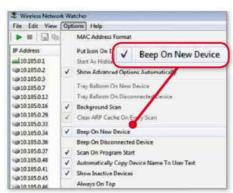


Right-click a video in VideoCacheView, then click 'Open Download URL In Browser'

offline viewing (we recommend playing them in VLC media player: www. videolan.org/vlc). Left-click a file to see information about it, including when you watched the video, and in which browser (it supports Internet Explorer, Chrome, Opera and Firefox). Right-click a file to play it, save it, or open it in the browser (see screenshot above).

WirelessNetworkWatcher www.snipca.com/19487

If you ever suspect someone else is piggybacking on your Wi-Fi, run WirelessNetworkWatcher. It scans your network and lists all the computers and devices using it, showing the IP address and MAC address for each. It also runs a background scan to check for new devices connecting to the network. To hear a beep when one connects, click Options then tick 'Beep On New Device' (see screenshot below).



in WirelessNetworkWatcher, tick 'Beep On New Device' to receive alerts whenever a device joins your network

WebBrowserPassView www.snipca.com/19532

To recover passwords old and new, use WebBrowserPassView. It shows passwords for your accounts in Chrome, Firefox, Internet Explorer and Opera. It rates their strength (from 'very weak' to 'very strong') and shows the date you created it. NirSoft says that it will soon update the program to reveal master passwords, which are used in password-management services like LastPass.

Mail PassView www.snipca.com/19489

What WebBrowserPassView does for browsers, Mail PassView does for email programs. Run it and you'll see your passwords for Outlook (including the 2016 version), Gmail, Windows Mail, Thunderbird, Yahoo Mail and other services. You'll also see what server type the email account is on - POP3, IMAP or SMTP - which is always handy when you need to set up email forwarding, or sync across devices.

Don't worry if your security software flags up Mail PassView as malicious. NirSoft says that antivirus products often misclassify its password-recovery tools as dangerous. Visit NirSoft's blog to read more about these false-positive results: www.snipca.com/19535.

ProduKey www.snipca.com/19490

We all know that we should make a note of our Windows/Office Product ID and Product Key, but it's easy to forget, because it may seem like you'll never need them again after the first time you use them. These crucial details are revealed by ProduKey. Scroll to the bottom of its download page (URL above) to see command-line options you can use to operate it. It doesn't yet work for Windows 10, so visit Microsoft's website for instructions instead: www.snipca. com/19536.

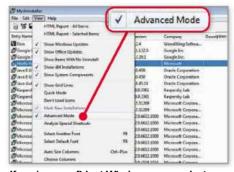
MyUninstaller www.snipca.com/19481

Uninstalling programs is never as simple as it should be, which is why we all need tools that well and truly kick them into

MEET THE MAN **BEHIND NIRSOFT**

At the controls of NirSoft is Israeli software developer Nir Sofer. He is very proud of his one-man operation, boasting that at NirSoft "there is no CTO or CEO, there is no secretary, there is no development team, and there are no rented offices". Sofer doesn't make a living out of the site. Instead it is a huge labour of love. He says he uses all his free time to make new programs, and add new tools to existing ones.

Sofer's first site, launched in 2001, contained tools for his own personal use. The site we know and love now, www.nirsoft.net, arrived three years later. It has grown to offer over 100 programs, which are used by millions of people worldwide. He is open to comments on programs, and suggestions for new ones - just email him at nirsofer@ yahoo.com.



If you're a confident Windows user, select 'Advanced Mode' in MyUninstaller

touch. NirSoft's MyUninstaller isn't as powerful as some of the heavyweight uninstallers, such as IObit's program (www.snipca.com/19491), but it's worth trying if the built-in Windows tool doesn't work well for you.

It claims the top spot because of how much information it provides. As well as the obvious (product name, version etc), it tells you in which installation folder the program is stored, which website you downloaded it from, and its uninstall string that appears in the Registry.

It's easy to use – just right-click what you want to remove, then select 'Uninstall Selected Software'. If you're a confident Windows user and know exactly what you want to remove, consider switching on Advanced Mode. This lets you uninstall multiple programs at once. Click View, then tick 'Advanced Mode' (see screenshot above).

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Problems Solved

PROBLEM OF THE FORTNIGHT

Why can't I enable ReadyBoost?

I decided to buy an HP Stream 11 and upgrade it to Windows 10, just for a play. I can upgrade the meagre 32GB SSD storage with an SD card, but my main concern is the 2GB of memory. I thought I'd enable ReadyBoost for some breathing space, but the system tells me it would gain no advantage, and has

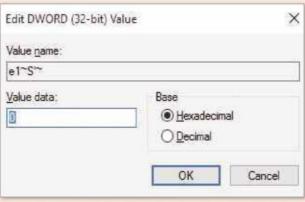
therefore disabled the option. Is there any way to hack this in the Registry? Surely if I purchase the fastest-available SD card, the machine will at least be able to call on extra memory? Or is there another reason Microsoft is stopping me from using this?

James Francis

We don't know Microsoft's specific reasoning, but ReadyBoost was designed for a time before the widespread adoption of SSDs as main hard drives.

It's commonly thought that ReadyBoost makes use of a USB memory stick (or SD card in your case) to provide 'extra memory', but that's not really what it does. Memory sticks and cards are much quicker than traditional hard drives, which store and read data from spinning magnetic platters - a bit like an old-fashioned record player. So, ReadyBoost uses this fast memory as a cache for frequently accessed files on your hard drive: when your computer needs to access one of these files, it is first transferred from (or to) a ReadyBoost-enabled memory stick/card - not the hard drive.

This is important background data for understanding why Microsoft disabled ReadyBoost in SSD-based systems: even the fastest memory sticks/cards will be little or no faster than your SSD, so



Change the number in the 'Value data' field from '2' to '0' in the Registry window to enable ReadyBoost

there's probably no benefit in caching the files they store on to a different drive. In fact, to do so might even slow things down a tiny fraction, because it introduces an unnecessary extra process to every read/write operation.

All of which is to say we think Microsoft is probably right. However, if you want to hack the Registry to force ReadyBoost to work on your system, you can. Be sure to back up first, just in case anything goes wrong.

Insert the SD card you want to use, then press Windows key+R, type regedit and press Enter. Next, in the Registry Editor, press Control (Ctrl)+F to open the Find dialogue, type AttachState and press Enter. It'll probably take a few seconds for the result to be highlighted, and it should be right under the parent key 'rdyboost'. Click AttachState in the left-hand pane and then, in the righthand pane, look for entries with a value of '0x00000002': these are the drives where ReadyBoost has been disabled.

Unfortunately there's no easy way to tell which drive is which. The one at the bottom of the list is likely to be your SD card, but you'll need to use trial and error. Right-click its entry in the Name column and choose Modify. Change the number in the 'Value data' field from '2' to '0' and click OK. You can now enable ReadyBoost on that drive. If it's the wrong one, just repeat this step for the next entry up in the Name column.

What should I use instead of BitLocker?

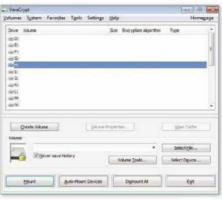
In Windows 10, Microsoft seems to have dispensed with the BitLocker encryption tool. I have previously used this feature to safeguard data that I move on to USB memory sticks. Do you know why Microsoft removed it, and is there a reliable free alternative?

Peter Rowe

Microsoft has not killed off BitLocker, but it's only available in Windows 10 Pro, Enterprise and Education. The only editions of Windows 7 to include BitLocker are Enterprise and Ultimate. Windows 8 Pro and Enterprise both have BitLocker.

Our guess is that you either used BitLocker on a work PC, and therefore probably under Windows 7 Enterprise, or you have the Ultimate edition on a different home computer. We also reckon you've bought a new computer with Windows 10 Home. Had you updated a Windows 7 Ultimate PC to Windows 10 under Microsoft's free-upgrade programme you would've got Windows 10 Pro, which has BitLocker.

As for your new PC, you could upgrade it by buying Windows 10 Pro, but for this one feature there are free alternatives. We'd suggest downloading VeraCrypt (www. snipca.com/19353). This is an updated version of TrueCrypt, which was discontinued by its authors due to security concerns. VeraCrypt claims to have dealt with TrueCrypt's security problems.



VeraCrypt is a free alternative to upgrading to Windows 10 Pro to use the BitLocker tool

Our experts solve all your tech problems

Email us your problem and we'll try to help: noproblem@computeractive.co.uk

Why won't my PC find Windows first time?

When I switch on my PC, I now get a message saying that the operating system has not been found, along with a prompt to insert a disc containing an operating system. If I press Enter, this message is cleared and then Windows launches just fine. I'll admit that it's a very old machine (running XP!), but it does everything I need. It never used to do this, so I did wonder if this was a trick from Microsoft to get me to upgrade. But then why would Windows load afterwards? Is there a way to get it to load first time, without having to press Enter? It seemed to coincide with the date and time resetting themselves, but both are now fine.

Ashley Harrison

This has nothing to do with Microsoft. In fact, all that's happening is that your PC is

I am running Windows



Enter the BIOS and change the boot order if your PC fails to load first time

now looking first at some other drive probably the CD-ROM or DVD-ROM drive - for an operating system, rather than the hard drive. It doesn't find one, and so tells you this, requesting that you press Enter to acknowledge the 'problem'. Your PC then moves on to the next drive, which is the hard drive containing XP - so it then launches as normal.

Why is it doing this all of a sudden? Because your aged PC's CMOS battery died, or is all but dead and dropping out, resetting the BIOS to its defaults - and putting the optical drive back at the top

of its 'boot order' list. We can safely assume that when the PC was made its manufacturer ensured that the hard drive was at the top of this list. This is also why your PC's date and time reset themselves.

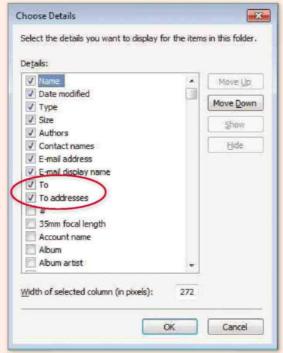
It's pretty easy to put right, but first replace the CMOS battery to stop it happening again. Open your PC, carefully prise out the disc-like battery and fit a replacement - you need a CR2032 type.

Put your PC back together then start it and press the necessary key to enter the BIOS - usually F2 or Delete (Del). Now use the cursor (arrow) keys and Enter to navigate the menus. Find 'Boot Order' or 'Boot Sequence' or similar, then ensure your hard drive is at the top. Press Escape (Esc) to exit, and choose the option to save.

How do I see who sent old emails?

Live Mail (WLM, www. snipca.com/19266) on a Windows 7 PC. Recently, my hard drive died, taking with it a load of emails. As an alternative, I turned to a store of emails I had backed up on an external drive. As you can see from my screenshot, when I view these emails, I'm missing key information - most importantly to whom the various emails were sent. Is there any way to add a column showing this information? Leslie Rushbrook

To protect your privacy we're not printing your screenshot so, for the benefit of other readers, we'll explain that you are viewing your backed-up emails individually - as files with a .eml extension in



Tick either To or 'To addresses' to get info on old emails

Windows Explorer. If you want to keep things this way, then all you need to do is right-click one of the existing column headings and tick either To or 'To addresses', or both. Click OK and the information you need will appear.

However, did you know that you can easily put these backed-up emails back into WLM? Right-click in WLM's left-hand navigation pane and choose 'New folder'. Give it a name and choose the desired location under the relevant account. Now return to the Windows Explorer folder that contains your .eml files. You can either press Control (Ctrl)+A to select the lot, or hold down Ctrl to select them individually, or Shift to select batches. Now just drag and drop the selected emails to the new folder in WLM.

Problems Solved

Why does my PC's display keep dimming?

In Windows 10's settings I have set my laptop to turn off the display on battery power after 10 minutes, and after one hour when plugged in to the mains. However, the display goes dark after about three minutes anyway. A tap on the Enter key restores it, but this is annoying. It did not happen in Windows 8 or 8.1. A solution would he welcome

Charles Moon

It's possible that your laptop is configured with 'adaptive brightness', which is deciding that the ambient light is sufficiently low that it should dim the screen. To check, click Start followed by Settings and then 'Power & sleep' followed by 'Additional power settings'. This puts you on the Power Options screen. Now click 'Change plan settings', followed by 'Change advanced power settings', then scroll down to find Display and click to expand it, followed by 'Enable adaptive brightness'. Now set both 'On battery' and 'Plugged in' to Off, Click OK.

If this doesn't help it could be that the current power profile is corrupt. Return to the Power Options screen, but this time click 'Create a power plan' on the left. Give it a name, click Next, choose your key settings and click Create. Now click 'Change plan settings' alongside the new plan, followed by 'Change advanced power settings' and fine-tune as needed.

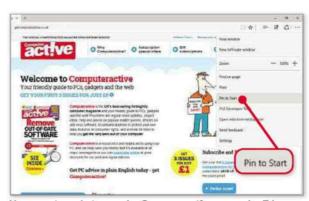


Adjust the 'Enable adaptive brightness' setting if your display keeps dimming

How do I pin websites to Windows 10's Taskbar?

I have recently upgraded to Windows 10. In Windows 7, I could copy a web address and pin it as a shortcut on the Taskbar or to the Favorites bar in Internet Explorer (IE). Is there a way to do this in Windows 10? I am aware that I can do this with programs, but I can't figure out how to do the same with web shortcuts.

David Reginald Charge



You can pin websites to the Start menu if you use the Edge browser

It sounds like you're using Edge, because the current version does not offer the ability to drag and drop shortcuts, as you could with IE. The Edge icon looks very similar to that of IE, and it sits on the Taskbar from the moment you install Windows 10 - so you might not have realised you're using the new browser.

If you want to continue using Edge, one

option is to pin websites to the Start menu instead. Visit the relevant website, then click Edge's menu button (three dots, top right) and choose 'Pin to Start'.

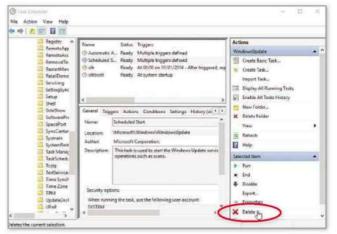
Alternatively, you can just launch IE and do it in exactly the same way as you used to. Open the Edge menu again, but this time choose 'Open with Internet Explorer'. Now just drag and drop the website icon from IE's address bar to vour Taskbar.

What's this Windows startup message?

Command Prompt window when Windows 10 starts, which displays a message that says "Windows cannot find C:\Program Files\ User Extensions\Client. exe". I click the red cross to close this and all seems fine. Any idea what's causing this?

My PC opens

John Storer



Delete entries from the Task Scheduler in the Selected Item section

We think your security software has detected and removed some malware. However, the malware in question had added an entry to Task Scheduler to launch itself on startup, which is not something your security software can resolve.

Press Windows key+R, type taskschd.msc and press Enter. Select 'Task Scheduler (Local)' in the left-hand pane, then look for the offending task in the Active Tasks list at the bottom. Double-click its entry.

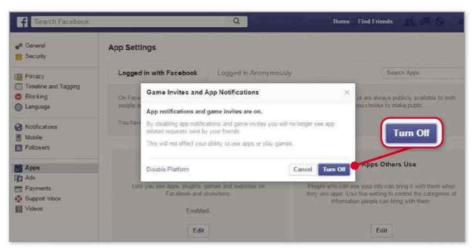
Click Disable under Selected Item, then reboot your PC. If the problem is resolved, repeat the above but this time click Delete under Selected Item. If not, click Enable to restore the disabled task, and then repeat to identify the culprit.

How do I stop Facebook game requests?

I'm quite sick of the endless game requests and notifications I receive from my Facebook friends. I've talked to some of them about it and it seems they didn't even know that their game updates were appearing in my news feed. Why does this happen, and can I stop it? Do they need to do it, or do I? I need simple instructions.

Alison Grove

It happens simply because your Facebook friends have installed gaming apps and not opted out of allowing these to post information automatically to their own walls. It's all too easy for this to happen, and your friends are unaware of the situation precisely because the posts are automatic.



Click Edit under 'Apps, Websites and Plugins', then 'Turn Off' to stop getting game requests

If you want to help your friends, tell them first to log into Facebook, click the down arrow at the top right, choose Settings and then click Apps. They should then click the pencil icon next to an app and choose Only Me. Tell them to repeat for all affected apps, then click Save.

But you can also take unilateral action by blocking individual or all notifications from your end. In your feed, click the down arrow next to a post and choose 'Hide all from [app name]'. To hide all such notifications, click the down arrow at the top right of your Facebook home page and choose Settings followed by Apps, and then click Edit under 'Apps, Websites and Plugins', followed by Turn Off.

Can I view two email accounts in Thunderbird?

I recently changed my ISP from TalkTalk to the Post Office. I now have two email addresses one ending @talktalk.net and the other ending in @pobroadband.co.uk, from the Post Office. I can access the @talktalk.net email address in Thunderbird, as before. However, to access my Post Office email I have to use a page where I type my Post Office email address and password and click 'Sign in'. I would like both email accounts accessible from Thunderbird. Is this possible, and if it is, how do I do it?

Arthur Smith

Yes, all you need to do is add your Post Office account to Thunderbird as a new account. First, click the menu button (three horizontal lines), then click Options, followed by Account Settings. Now click Account Actions, followed by Add Mail Account. Type your name, then supply



the @pobroadband.co.uk email address and password and click Continue. Thunderbird should configure everything automatically from here but, if it fails, click 'Manual config' and then fill in the Post Office email server details manually - you'll find them at www. snipca.com/19320.

However, a word of warning: your TalkTalk email address is on borrowed Add your Post Office account to Thunderbird by entering your details

time. Officially, the company says it discontinues ex-customer email

addresses after 30 days. Unofficially we know that these @talktalk.net email addresses sometimes continue to work for long after a subscriber has stopped paying for the company's broadband service. But the fact is that your access to TalkTalk's email servers could end at any time - so we'd recommend letting your contacts know that you have a new email address.



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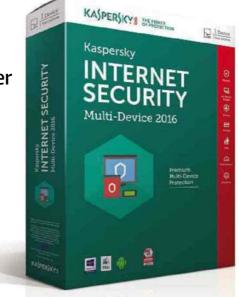
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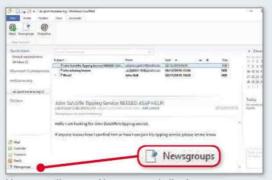
Whatever happened to... Usenet?

I spent years on the uk.sport. horseracing newsgroup. Then I upgraded my computer and my Usenet newsgroups were gone. It wasn't catastrophic, but recently I've been wondering where they went and how so many people and messages managed to disappear without anyone seeming to know or care.

David Barnes

In fact, nothing happened to Usenet or its newsgroups. Loads are still up and running, and you can dive right back in to the discussions - and probably without installing any additional software. But first, let's explore why Usenet fell off the radar.

The web as we now know it didn't exist when Usenet was at its peak, during the late 1980s and early 1990s. If you wanted to discuss stuff with others online, newsgroups were the place to be - but getting set up did need a bit of technical know-how.



You can still access Usenet – and all other newsgroups using Microsoft's Windows Live Mail (WLM)

Today, there are millions of websites on every conceivable topic, many with their own comments sections or forum. Using these is easy.

So, Usenet just gradually fell out of favour - but it's by no means extinct. Admittedly many newsgroups are now awash with spam, porn or other dodgy stuff, but we checked uk.sport. horseracing site and it still has a few useful regular contributors.

You can access it – and all other

newsgroups - using Microsoft's Windows Live Mail (WLM). You might have this installed, otherwise it's a free download from www.snipca.com/19266. Microsoft killed WLM's built-in newsgroup (NNTP) servers a while back, but you can set WLM using free public news servers (see www.aioe.org for

Select the Accounts tab, then click Newsgroups. Type your name and click Next. Now type

an email address for replies and click Next. Type nntp.aioe.org into the 'News (NNTP) server' box, click Next, then Finish. Wait for the list of newsgroups to download.

Use the search box at the top of the Newsgroup Subscriptions box to find what you're after, select the relevant newsgroup and then click Subscribe.

Want to know what happened to your favourite program, website or technology? Email noproblem@computeractive.co.uk

Can I send large files with Outlook?

In Issue 466 (page 58), you described how to send large files via email, using Outlook. Well, it doesn't work with Windows 8.1, which I use and am happy with. Simply, the 'Share from OneDrive' option doesn't appear under Insert. Is there another way, or is this just a Windows trick to persuade users to 'upgrade' to Windows 10? I use MailBigFile (www.mailbigfile. com), but it takes forever to upload, with

a 60MB file taking about one hour! So, how do I use the OneDrive method with Outlook?

Rupert Wilson

The method we described was for Microsoft's webmail service, Outlook.com, not the company's desktop email program - which is called Outlook (without the .com). There were fewer confusions of this nature when

Outlook.com was called Hotmail, so it's a shame Microsoft messed around with the names.

However, assuming you've got OneDrive up and running on your Windows 8.1 PC and have an active OneDrive account, you can use a different technique to

achieve the same result. Press Windows key+E to launch File Explorer, then navigate to your OneDrive folder. Now right-click a big file that you want to send and, from the pop-up menu, choose 'Share a OneDrive link'.

Now launch Outlook and write a new message in the normal way. When you're ready to insert a link to your big file, just right-click and choose Paste, or use the keyboard shortcut Control (Ctrl)+V. Click Send to send the email and then, at the other end, all the recipient needs to do to download the file is click the link and follow the prompts.

Share a OneDrive link

Use OneDrive to send large files from your Outlook desktop email

NEXT ISSUE

ON SALE 2 March

- What happened to my Google page?
- How do I stop LibreOffice second-guessing my typing?
- How do I fix my Windows search? ...And many more

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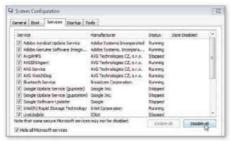


Windows shutdown

Solve never-ending shutdown, make the power button switch off and stop unwanted shutdowns

Windows shutdown never ends

When the Windows shutdown message remains on screen for a while, it's usually down to something you recently installed or out-of-date drivers. You'll need to uninstall the offending program, and look for the latest drivers for all attached devices. Microsoft's System Configuration can help to finger the culprit. Press Windows key+R, type msconfig and press Enter. Now select the Services tab, tick the 'Hide all Microsoft services' box then click 'Disable all', and also 'Disable all' on the Startup tab. Restart your PC and use System Configuration to enable disabled items one at a time, restarting each time. When Windows fails to shut down, the last item re-enabled is the cause. Leave it disabled, or turn to Google to research the problem.



Troubleshoot never-ending shutdown by disabling services using the System Configuration tool

Shutdown is really slow

Sometimes slow shutdown is normal -Windows often finalises programs, installations or updates during shutdown. But if this happens a lot a misbehaving program or driver could be the cause: follow the first tip to troubleshoot this. Slow shutdown can also be caused by file errors or even a failing hard drive. Right-click the drive in Explorer and choose Properties. Select the Tools tab, click the 'Check now' button then tick 'Automatically fix file system errors' and 'Scan for and attempt recovery of bad sectors'. Now click Start (see screenshot above right) and wait while Windows checks the drives for errors and fixes any problems it finds.



Drive errors can slow shutdown, so make Windows fix them automatically

No 'Shut down' option

If you use Windows Vista or 7 and notice that the 'Shut down' button has a label other than 'Shut down', then it's likely that in the past you've changed it. However, it's possible that a program has made the change itself without your permission. In fact, the 'Shut down' option is still there - but hidden in a pop-up menu, accessed by clicking the right-pointing arrow to the right of the button. But if you want the button to be 'Shut down', then first right-click a blank part of the Taskbar and choose Properties. Now select the Start Menu tab, open the dropdown menu alongside 'Power button action' and choose 'Shut down'. Click OK. If you can't find 'Shut down' in Windows 10, that's because it has moved: click Start, followed by Power - and there it is.

Windows shuts down automatically

If your PC sometimes seems to shut down and restart when you're away, then it's probably down to your Windows Update settings. In Windows 7



If your PC shuts down while you're away, check Windows Update

or 8/8.1, press Windows key+R, type wuapp.exe and press Enter. Now click 'Change settings' on the left then, from the dropdown menu on the right. choose an option other than 'Install updates automatically (recommended)'. In Windows 10, click Start, followed by Settings, then 'Update & security', followed by Windows Update. Now click 'Advanced options' and choose 'Schedule a restart'. A hardware fault is another possibility. If your PC's processor is getting too hot, for instance, then the computer will shut itself down. Carefully open your machine, then make sure all the fans are free from dust and able to turn freely. Also install the free SpeedFan tool (from www.snipca. com/19395) to monitor the temperature inside your system.

Windows shuts down when laptop is closed

This isn't actually a fault but a decision by your laptop's manufacturer. If it's not the behaviour you want, it's easily fixed. Press Windows key+R, type powercfg.cpl and hit Enter. Now click 'Choose what closing the lid does', on the left-hand side. In turn open both dropdown menus alongside 'When I close the lid' and choose either 'Do nothing', Sleep or Hibernate. Click 'Save changes'.

Power button doesn't shut down

Like the above tip, this isn't a fault but a feature set by the PC manufacturer. However, different manufacturers choose different actions, and it might feel odd if one PC's power switch shuts down, while another enters Hibernation or Sleep mode, or even ignores your press entirely. Again, press Windows key+R, type powercfg.cpl and hit Enter, but this time click 'Choose what the power buttons do'. Now, alongside 'When I press the power button' set both the 'On battery' and 'Plugged in' dropdown menus to 'Shut down', then click 'Save changes'.





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Compatibles: No.16 Set of 4 No.16 Black 12ml No.16 Colours 12ml each

Originals:
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No.18 Black 5.2ml
No.18 Colours 3.3ml each
No.18XL Set of 4

Compatibles: No.18 Set of 4 No.18 Black 12ml No.18 Colours 6.5ml each

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	£14.99 £17.99		
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PP-201 Plus Glossy II 2 6x4 50 sheets 7x5 20 sheets A4 20 sheets A3 20 sheets A3+20 sheets SG-201 Semi-Gloss 260 6x4 50 sheets A4 20 sheets A3 20 sheets	75gsm: £9.99 £11.99 £11.99 £27.99 £36.99)gsm: £9.99 £11.99	Archival Matte 192gsn A4 50 sheets A3 50 sheets A3+ 50 sheets Heavyweight Matte 16 A4 50 sheets A3 50 sheets	£29.99 £24.99 n: £14.99 £33.99 £44.99

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Compatibles:	
No.24 Set of 6	£22.99
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No.26 Polar Bear Inks Originals:	
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No.26 Black 6.2ml No.26 Colours 4.5ml each	£8.99 £7.99
No.26 Colours 4.5ml each No.26XL Set of 4 No.26XL Black 12.1ml	£7.99 £49.99 £14.99
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No.26 Colours 4.5ml each No.26XL Set of 4 No.26XL Black 12.1ml No.26XL Colours 9.7ml each Compatibles: No.26 Set of 4 No.26 Black 10ml	£7.99 £49.99 £14.99 £13.99 £14.99 £3.99
No.26 Colours 4.5ml each No.26XL Set of 4 No.26XL Black 12.1ml No.26XL Colours 9.7ml each Compatibles: No.26 Set of 4	£7.99 £49.99 £14.99 £13.99

Compatibles: No.26 Set of 4 No.26 Black 10ml No.26 Colours 7ml each	£14.9 £3.9 £3.9
T0481-T0486 Seahorse Inks Originals:	•
Set of 6 Colours 13ml each	£69.9
Compatibles:	£ 10.9
Set of 6	£19.9
Colours 13ml each	£3.9

T0541-T0549 Frog Inks	2
Originals: Set of 8 Colours 13ml each	£105.99 £14.99
Compatibles: Set of 8 Colours 13ml each	£27.99 £3.99
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		42	
T0711-T0714 Cheetah Inks Originals: Set of 4 Black 7.4ml Colours 5.5ml each Compatibles: Set of 4 Black 7.4ml Colours 5.5ml each	£32.99 £8.99 £8.99 £14.99 £4.99 £3.99	Originals: No.38 Colours 27ml each No.300 Black 4ml No.300 Colour 4ml No.301 Black 3ml No.301 Colour 3ml No.350 Black 6.5ml No.355 Black 6.5ml No.363 Black 6.5ml No.363 SETOF6 No.363 SETOF6 No.363 SETOF6	£26.9 £10.9 £12.9 £9.9 £11.9 £11.9 £14.9 £13.9 £39.9 £39.9
T0791-T0796 Owl Inks Originals: Set of 6 Colours 11.1ml each Compatibles: Set of 6 Colours 11.1ml each	£72.99 £12.99 £19.99 £3.99	NO.304 Black bml NO.364 PSP/(/M/Y 3ml each NO.364X Black 14ml NO.364XL Black 14ml NO.364XL SET OF4 NO.920XL SET OF4 NO.920XL SET OF4 NO.950XL SET OF4 Compatibles:	£6.9 £21.9 £13.9
T0801-T0806 Hummingbird Ink Originals: Set of 6 Colours 7.4ml each	£49.99 £8.99	No.15 Black 46ml No.21 Black 10ml No.22 Colour 21ml No.45 Black 45ml No.56 Black 24ml No.57 Colour 24ml	£4.9 £7.9 £11.9 £4.9 £9.9 £12.9

Colours 5.5ml each	£3.99	NO.303 SET OF 6	£39.99
		No.364 Black 6ml	£7.99
T0791-T0796	111	No.364 PB/C/M/Y 3ml each	
Owl Inks	400	No.364 SET OF 4	£21.99
Originals:	2.44	No.364XL Black 14ml	£13.99
Set of 6	£72.99	No.364XL PB/C/M/Y 6ml each	£12.99
	£12.99	No.364XL SET OF 4	£49.99
Colours 11.1ml each	£12.99	No.920XL SET OF 4	£46.99
Compatibles:		No.932XL SET OF 4	£43.99
Set of 6	£19.99	No.950XL SET OF 4	£69.99
Colours 11.1ml each	£3.99	Compatibles:	
T0004 T0006	1	No.15 Black 46ml	£4.99
T0801-T0806	T. Sec.	No.21 Black 10ml	£7.99
Hummingbird Ink	S	No.22 Colour 21ml	£11.99
Originals:	1	No.45 Black 45ml	£4.99
Set of 6	£49.99	No.56 Black 24ml	£9.99
Colours 7.4ml each	£8.99	No.57 Colour 24ml	£12.99
Compatibles:		No.78 Colour 36ml	£9.99
Set of 6	£19.99	No.110 Colour 12ml	£10.99
Colours 7.4ml each	£3.99	No.300XL Black 18ml	£14.99
COTO TI TITIL COCI		No.300XL Colour 18ml	£16.99
T0871-T0879	-0	No.301XL Black 15ml	£14.99
Flamingo Inks		No.301XL Colour 18ml	£16.99
	0.00	No.337 Black 21ml	£10.99
Originals:		No.338 Black 21ml	£10.99
Set of 8	£66.99	No.339 Black 34ml	£12.99
Colours 11.4ml each	£9.99	No.343 Colour 21ml	£12.99
Compatibles:		No.344 Colour 21ml	£14.99
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T0961-T0969	100	No.363 Black 20ml	£6.99
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Originals:	(Table 1	No.363 SET OF 6	£24.99
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3	plusnet	Plusnet: Broadband	£9.99 (£1 for 18 months)	18 months	17Mbps max speed	∞ unlimited	£12.00
4	E	EE: Broadband & Calls	£9.95 (£1 for 12 months)	12 months	17Mbps max speed	unlimited	£12.00

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

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- SPY ON YOUR OWN PC
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Jargon Buster

32bit A measure of how much information a computer can process at once. Most older computers are 32bit.

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

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

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

Add-on See Extensions.

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

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

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.

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.

Clean install An operating system installation that overwrites all other content on the hard drive.

CMOS Complementary metaloxide semiconductor. Can refer to both a type of image sensor chip used in some digital cameras and another chip on PC motherboards that stores the date and time.

Command line A way to control a computer by typing instructions one at a time. In Windows this is called the command prompt.

Cookie A small text file stored on your computer by a website. Used to store browsing preferences, website log-in details and so on.

DisplayPort A new socket for connecting monitors that's still relatively rare.

Driver A file that tells Windows how to work with an external device.

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

Extension A program that adds extra features to your browser.

False positive When an antivirus program wrongly detects a malware infection.

Ghosting In relation to television screens, the appearance of an offset second image that's a ghostlike facsimile of the first. This effect can be caused by radio interference or – in the case of 3D images – poor viewing position or cheap glasses.

Gigabit Ethernet A very fast networking standard that can transfer data at up to 1,000Mbps. **IMAP** Internet Message Access Protocol. A method for email that lets the user manage messages stored on a remote server.

IP address Internet Protocol Address. A unique set of numbers, separated by full stops, used to identify computers and websites on the internet.

M.2 A standard specification for internal PC expansion cards and connectors.

MAC address Media Access Control. A unique code that identifies any router. A laptop PC might have one MAC for its wired network socket and another for wireless.

Plug-in A small program that adds extra features to software or to your web browser.

POP3 Post Office Protocol 3. A system for remotely accessing and retrieving email from an ISP.

Ransomware Malware run by hackers who take over your PC and demand payment to release it.

Registry kevs The Windows Registry equivalent of a folder.

Root To perform tasks on Android devices that aren't permitted by the manufacturer.

SATA 3 The latest and fastest version of the SATA interface for connecting internal storage devices to a computer.

SD card Secure Digital card. A popular type of memory card.

SMTP Simple Mail Transfer Protocol. A standard for sending email messages. It is now largely reserved for sending messages rather than receiving them.

sRGB A standard RGB colour space for use on monitors, printers and the internet

.SRT A file format for video subtitles

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

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

Uninstall string Registry info that lets you remove programs using Command Prompt.

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

USB 3.0 An even faster version of the USB standard.

USB 3.1 The latest version of the USB hardware interface.

USB Type-C A new connector that's reversible.

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Graphics card A component in a computer that produces the image shown on the monitor.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals. It is found on many new TVs and media PCs.

Hotspot A public area covered by a Wi-Fi network that allows you to access the internet, either free or for a fee.

HTML5 The latest version of the Hypertext Markup Language used to create most web pages. HTML5 will soon replace plug-ins such as Flash and Java.

Megapixel A measure of the amount of detail that can be recorded by a digital image. A onemegapixel image is made up of a million dots (pixels).

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

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

Optical image stabilisation

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

The Final Straw



KEN RIGSBY is Computeractive's Mr Angry

This issue Ken Rigsby has had a bellyful of the..

Raspberry

his column isn't supposed to be a popularity contest, is it? I do hope not, because I'm about to reveal how I feel about one of the bestselling computers that the UK technology industry has ever produced - the Raspberry Pi.

Actually, my real ire is reserved for the recently announced Raspberry Pi Zero, but I'll come back to that. So just for a moment let's think about the general concept of the Pi.



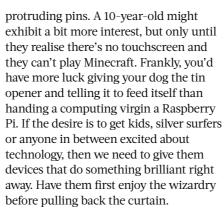
It's not just technically limited by modern standards - it's also a dire introduction to computers



It is everywhere. It's on TV. It's in newspapers. It's in magazines (including Computeractive). It's in schools. And, as the Raspberry Pi Foundation has sold well over 5 million units, it might well be in your home (probably stuck on a shelf somewhere gathering dust, but in your home nonetheless).

So what's the problem? Simple: the Raspberry Pi is rubbish. Not just technically limited by modern technology standards, but also a dire introduction to computers - for kids, or anyone.

Don't believe me? Give one to a toddler, then watch what happens. They'll use it to brush their hair, pretend it's a harmonica and then hide it in one of your shoes to extract maximum pain from those sharp



Hand a technophobe your smartphone or tablet, then set it to the home page. Tell them to swipe or tap. They'll get it right away, because everyone can do something with a touchscreen device. Touchscreens are magical. If they ask "How does that work?", then tell them honestly that you haven't a clue. But also tell them that vou're damn sure the Raspberry Pi won't teach them. Yes, the Raspberry Pi runs Minecraft, and the basic programming language Scratch. It even runs them pretty well. But to get the thing up and running you pretty much need a degree in Linux.

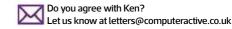
That's why Raspberry Pi books and magazines are best-sellers. A nation of well-meaning parents splashed out on the original Pi and then realised that neither they nor their kids had the slightest clue what to do with it. So they bought reading materials, realised they

needed to borrow a keyboard, mouse and monitor (you know, like a real PC), then swore at Linux a lot, clicked some icons, found Minecraft, launched it, played it a bit, launched Scratch, then scratched their heads a bit. Finally they realised it was all a bit too much, so they put it on that aforementioned dust-gathering shelf, pledging to try again another day. Millions remain there.

So why do I single out the new Raspberry Pi Zero for particular disdain? After all, it only costs £4. Because it's just less of the same. It has less memory, and fewer ports. It doesn't even have the original Pi's sticky-out pins to keep your toddler's hair neat and tidy.

Here's an idea for you. Before coughing up four quid for a Zero, prise open your TV remote control and then remove the circuit board. Voila! You have a free bare-bones computer! All you've got to do now is attach a keyboard, mouse and display, figure out how to make Linux work on it and you're good to go.

Admittedly it won't be easy, but do you expect the world on a plate? If it all seems a bit too much, then put it away for the day. But don't expect to relax in front of Midsomer Murders because you've just bust your TV remote.



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