

**31** PAGES OF WINDOWS  
STEP-BY-STEP GUIDES  
DO MORE WITH YOUR PC



IMPROVE WINDOWS 10  
MASTER CORTANA'S AMAZING NEW FEATURES



# Windows

## Help & Advice

**PLUS!**

MAKE ANY  
PC START UP  
FASTER

THE PERFECT WAY TO

# REINSTALL WINDOWS

Make any PC **more reliable** and **easier to use** with our **10-page guide**



### ALSO INSIDE...

- ✓ Fast photo fixes
- ✓ File Explorer tips
- ✓ Security cameras
- ✓ Save battery life
- ✓ Fix PC problems
- ✓ Tweet like a pro



## KEEP 7 WINDOWS ALIVE

TIPS FOR RUNNING  
OLDER VERSIONS  
OF WINDOWS

### NEW TECH TESTED & RATED

- JBL PLAYLIST SPEAKER
- LENOVO MIIX 510
- BLUETOOTH HEADSETS
- CHUWI LAPBOOK

Future

# Get equipped and take control with the new Xbox One Accessories.

Choose from a variety of new wireless controllers in different colours and styles – all with the same great features.

Visit [xbox.com/accessories](http://xbox.com/accessories)



XBOX ONE



Windows 10



Special Edition Xbox Wireless Controller  
– Winter Forces



Xbox Wireless Controller  
– Red



Xbox Wireless Controller  
– Green/Orange



Special Edition Xbox Wireless Controller  
– Ocean Shadow



The source for tech buying advice

[techradar.com](https://www.techradar.com)



# Windows Help & Advice

## Welcome

If your PC no longer runs as quickly or as sweetly as it did when you first bought it, then reinstalling Windows could be the best way to restore your computing sanity.

In our lead feature starting on page 14, we explore five different ways you can reinstall Windows 7, 8.1 or 10 – from a simple repair or refresh, to a full reinstall where you wipe everything on your PC's hard drive and start over.

As ever our Explore section (starting on page 27) is packed

with step-by-step guides to help you get more from your PC – from simple ways to make your PC start faster to the latest enhancements to Cortana.

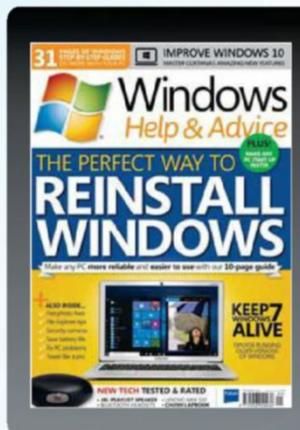
If you own an older PC running Windows 7, we'll also show you how to keep the operating system alive with our in-depth feature starting on page 66. And if you're thinking of getting into smart home technology, be sure to read our home security camera guide (page 60).

Enjoy the issue,

Rob

**Rob Mead-Green** Editor

[www.facebook.com/windowsmag](http://www.facebook.com/windowsmag)



**SUBSCRIBE TO THE MAG TODAY  
AND SAVE – JUST TURN TO PAGE 24!**

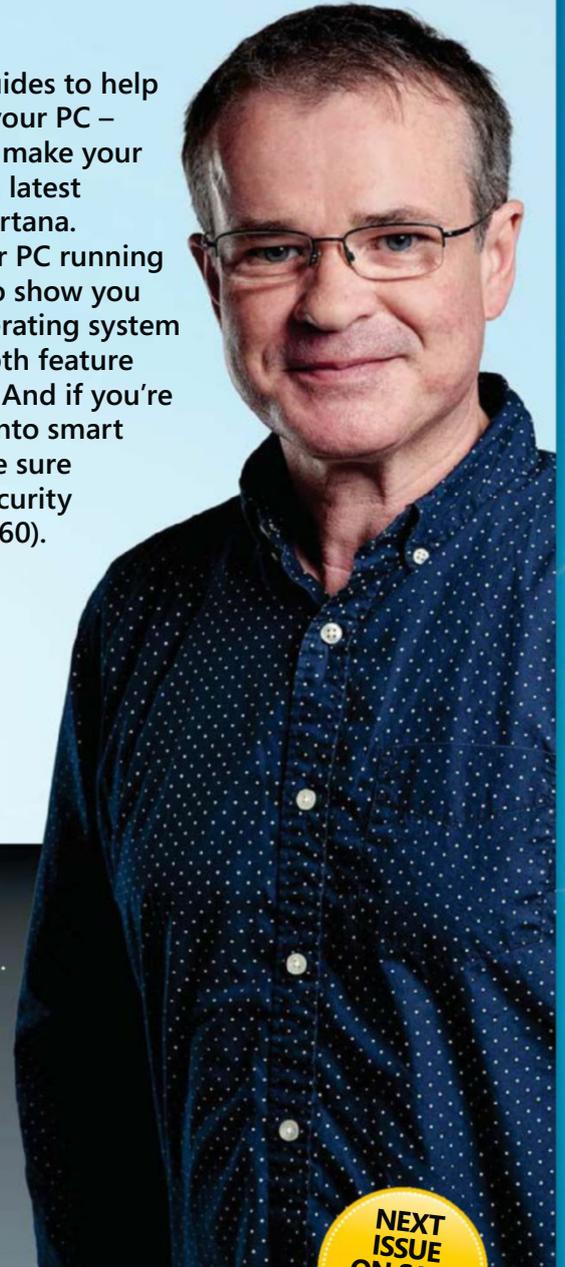
We pride ourselves in being the only magazine on the shelves to show you exactly how to get the very best from the Windows operating system, whether you're using Windows 10 or Windows 8.1. Also, don't forget to take a look at how you can read the magazine on your laptop, smartphone or tablet.



Don't miss our **NEXT ISSUE**, when we will show you how to...

- Speed up any PC → Declutter your computer → Stop malware and viruses
- Add filters to Photos → Rethink the way you use Windows 10

Subscribe now at [www.myfavouritemagazines.co.uk/subwha](http://www.myfavouritemagazines.co.uk/subwha)





# Windows Help & Advice

## FEATURES

### 14 Reinstall Windows

Make your PC feel like new with our complete guide to reinstalling Windows

### 60 Smart security cameras

Home security tech is getting smarter all the time. This is what you need to know

### 66 Keep Windows 7 alive!

Own an older PC running an older OS? Then be sure to read these tips and tricks!

## REGULARS

**8 Discover** How your PC can help keep you and your family organised; Windows Phone RIP; and the trouble with Kodi

**24 Subscriptions** Save up to 46% on print and digital issues

**35 Back issues** Missed an issue? Don't miss out – order now while stocks last!

**51 Digital issues** Get the world's best Windows mag on your phone or tablet

**98 Next month** Find out what's coming up in the October 2017 issue



## EXPLORE The best PC tutorials



Your guide *Rob Mead-Green* says...

"If you're looking for better ways to use your home computer, then this is the place to start. We'll show you all the tips and tricks the experts use and more!"

**28** Make your PC start up faster with a few simple tips and tricks

**32** How Twitter can help you become a social media master

**36** How to add an external hard drive to your computer

**38** Enhance any image with Aviary Photo Editor

**42** Batch rename photos quickly and safely with PhotoRenamer

**46** Take charge of your PC's power and sleep settings

**48** Do more with Cortana

**52** Stop websites tracking you

**56** Get more from File Explorer



## SUPPORT

**70** Get answers to your technical questions with help from our PC experts



# SUBSCRIPTION BUNDLE OFFER

Print and digital bundle – only £14 every 3 months  
*Find out more on page 24*

ON THE COVER

## PICK YOUR PERFECT REINSTALL

14 Make any PC more reliable and easier to use with our 10-page in-depth guide



## GET STARTED WITH SECURITY CAMERAS

48 How to choose the right smart security device for your home



## KEEP 7 WINDOWS ALIVE

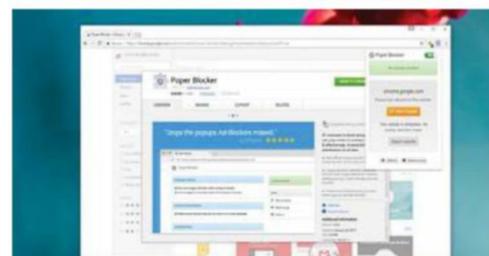


58 Using Windows 7? Here's how to make it run smoothly



## UPGRADE

- 83 Our expert reviews
- 84 Lenovo Miix 510
- 86 Chuwi LapBook 12.3
- 88 AOC Porsche Design monitor
- 90 JBL Playlist Bluetooth speaker
- 92 Bluetooth headphones
- 95 Best free pop-up blockers



Follow us on...



[www.twitter.com/windowsmag](https://www.twitter.com/windowsmag)



[www.facebook.com/windowsmag](https://www.facebook.com/windowsmag)



# Discover

▶ NEW THINGS TO DO ▶ AMAZING WEBSITES ▶ FASCINATING FACTS



**MARK IT** Make a note of it on your phone and you'll remember later at home.

# Get everything done Organise your life and never forget a thing

Combine your Windows PC, the internet, and your smartphone to keep a note of every single task

Everything is interconnected these days. While this obviously helps advertisers see what sites you've visited and repeatedly show you ads for things you don't want – mentioning no names, Amazon – the fact that your PC and phone are both hooked up to the internet at all times means you can keep a fully updated diary or to-do list current no matter which device you're using

An obvious first candidate for doing that might be OneNote. It comes bundled with Windows 10, and is perfect for sketching quick notes. Link it with your OneNote account, and you can open synchronised notebooks on a similarly-linked mobile version of the app.

You can keep a fully updated diary no matter which device you're using

## WORK TOGETHER

Collaborative calendars are perfect for a connected family. We in the office tend to favour Google Calendar, which has a host of easily accessible mobile apps and a web interface at [calendar.google.com](http://calendar.google.com). Google's Calendar format is open, too; if you wanted

to manage it with Windows' built-in Calendar app, it's simply a case of adding your Google account via its settings screen. You'll then see everything that you've already booked in online, get alerts in your Windows Action Centre, and can add new items to that same Google calendar which will be reflected on each one of the devices that you have connected.

While your to-do list could be well served by Google's neat Keep application, which has mobile versions and a web interface,

there's no good way to access that through a Windows app.

Todoist ([www.todoist.com](http://www.todoist.com)) on the other hand, is perfect for synchronising your upcoming tasks

between your smartphone, the web, and its Windows 10 app, which is available, as a free, download from the Windows Store.

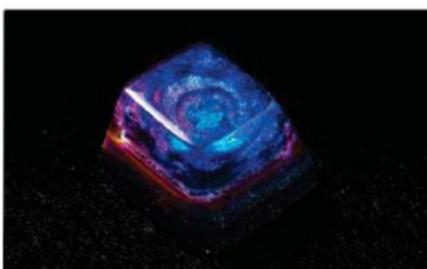
Todoist has some paid-for features, but it's super-useful even if you don't cough up, turning getting your tasks done into a points-scoring game.

## MECHANICAL KEYBOARDS The clack is back

Once upon a time, the noisy, satisfying click of a mechanical keyboard was the norm. Most keyboards nowadays use dome switches, with a cheap silicon membrane and a single circuit board replacing potentially hundreds of pricey switches, but there's a growing movement propping up a new wave of tactile noisy keyboards. While you can pull a good one off the shelf for upwards of £75, expect to pay a lot more for the bespoke variety...



**WHITE DELIGHT** The WhiteFox keyboard includes custom-designed switches and LED lights.



**CAP IT** Artisan keycaps are highly sought after by keyboard customisers but can cost a pretty penny.



**CUT DOWN** Many niche designs exist, allowing new mechanical keyboards to get super-compact.

## The Knowledge... + <>



### Windows Phone

#### What's happening with Windows Phone?

Well, it's dead. Microsoft has officially put the hammer down and ended all support for Windows Phone 8.1, only three years after its original release. Handsets won't stop working, but there'll be no more updates. So if you're rocking a classic Lumia phone, you might want to start looking for a replacement.

#### What does this mean?

Technical help is off the table, for a start. If you run into a problem, you're on your own. And, at least in theory, Windows Phone devices could now pose a security risk; without the latest updates, there's a possibility that a determined hacker could slip something nasty past its defences – although Microsoft has been known to issue patches to unsupported platforms, including Windows XP, should something serious come up.

#### Why has this happened?

Windows Phone, for all its positives, wasn't the runaway success that Microsoft has hoped it might be. In fact, it was a failure: it topped out at 10% UK market share, and recent stats suggest that Windows Phone accounts for less than 1% of the total market. It was time for it to go.

#### So Microsoft is done with phones?

Not by a long shot. Windows 10 Mobile still seems to be a big part of Microsoft's plans. There are persistent rumours that new handsets maybe in the works, and CEO Satya Nadella has hinted that they might not be traditional black rectangles. What that means, though is as yet unknown.

#### What's up next?

Quite possibly a rather major launch: word has been bubbling about a Surface Phone for some time, and given the care and attention that Microsoft has devoted to its Surface line of tablets and laptops, it could be the device that pushes Windows 10 Mobile to new heights. It won't be cheap, though – nothing Surface is.

#### Any idea when?

Rumours suggest a late 2017 launch with handsets going on sale in 2017 or 2018.

Everyone's talking about

# The big Kodi crackdown

The media centre itself isn't the problem – it's the way people are using it that has regulators fuming

Kodi, once known as XBMC, is one of the most popular media centre apps around. With versions available for everything from the PC desktop to Android and beyond, the open-source software – this means it's free to use and modify – is the most widely installed media centre, too. There's absolutely nothing wrong with using Kodi, but its ability to run extensions, many of which vastly simplify the task of gaining access to less-than-legal content, has movie studios and TV networks up in arms – and the fact that some unscrupulous retailers are selling boxes loaded with these extensions has led to legal action from organisations far and wide.



## LETHAL FORCE

Some of the most popular Kodi piracy add-ons, like Exodus and Phoenix, have been seemingly scrubbed from the internet. Attempting to download them now leads to errors, and the sites hosting the illegal streams and files they relied upon have been targeted with takedown requests or legal action from major studios. While others will likely pop up in time – such is the nature of these things – there's no doubt that Kodi's brief

run as the de facto leader in plug-and-play piracy is nearing its end. Users of these add-ons should be worried, too: the EU Court of Justice has recently made a ruling, which clarifies that streaming an illegally-reproduced movie or TV show is an equivalent offence to actually downloading it.

## KODI'S REACTION

While it's been effective in taking down many of the big offenders, this crackdown isn't entirely playing fair to the otherwise perfectly legal Kodi. Facebook, for example, now prohibits sale of 'products or items that facilitate or encourage unauthorised access

to digital media', which includes Kodi boxes – whether they've been loaded with nefarious extensions or not. The social network joins eBay and Amazon in prohibiting their sale. But you're still free to install Kodi on your own, and its team of volunteer programmers isn't angry. In a post on kodi.tv, developer Christian Hewitt stated: "if the Kodi userbase drops a huge percentage because pirate services flee or die, we're fine with that."

Download this... + <>

## It Is As If You Were Doing Work

<https://pippinbarr.github.io/itisasifyouweredoingwork/>

A weird one, this. Part game, part art project, part nostalgic resurrection of classic Windows sounds, *It Is As If You Were Doing Work* is, as its title suggests, a simulation of doing computer busywork. You'll mash your keyboard to type documents, set dates, tweak sliders, close pop-ups, and inevitably be interrupted just as you were getting a task finished. Now and then you'll be granted an enforced break, during which you can play a simple version of *Breakout*, change your desktop wallpaper, or put on some music, then it's back to work. Over time you'll earn promotions and work your way up through the company ranks although this, perhaps to make a statement about the futility of work, gets you absolutely nothing bar a new title. This might not last you long, but it's strangely satisfying to do fake work when you're taking a break from the real thing.



**LOOK FAMILIAR?** Keep up with your work or your desktop will get swamped.

Follow us on...



[www.twitter.com/windowsmag](http://www.twitter.com/windowsmag)

facebook

[www.facebook.com/windowsmag](http://www.facebook.com/windowsmag)

## THE 60-SECOND QUIZ

Pens at the ready, your time starts now!

**1** Which of these file types is an image?

- A .exe
- B .doc
- C .png

**2** What does PDF stand for?

- A Police Department File
- B Perishable Document File
- C Portable Document Format

**3** Which is not used to switch between programs?

- A [Alt] + [Tab]
- B [Ctrl] + [Enter]
- C [Win] + [Tab]

**4** Which program opens .ppt files?

- A Paint
- B Notepad
- C PowerPoint

**5** Which of these files would you expect to be the largest?

- A .txt document
- B .wmv movie
- C .jpg image

**6** What do .zip, .rar and .7z files have in common?

- A They are compressed
- B They are movie files
- C They are viruses

Answers 1C, 2A, 3B, 4C, 5B, 6A

NEXT ISSUE ON SALE

Friday

15

September

# GET THE MOST FROM WINDOWS 10 WITH OUR COMPLETE MANUAL

All that you need to know to get started with your Windows PC or laptop, including the best tips, tricks and tutorials!

NEW

## Windows 10 The Complete Manual

Future  
BOOKAZINE

ON SALE  
NOW

The independent handbook for Windows users

Master  
your PC  
today!



100% UNOFFICIAL

ISBN 978-1-78546-639-7-7  
9 781785 466397

Future

FIFTH EDITION  
PUBLISHED IN THE UK  
£7.99

Future

Ordering is easy. Go online at:  
[www.myfavouritemagazines.co.uk](http://www.myfavouritemagazines.co.uk)  
Or get it from selected supermarkets & newsagents

# Facts & figures

Rob Mead-Green reveals a host of fascinating digital facts



## 104 MILLION

Number of people who now subscribe to Netflix, the movie and TV streaming service. It added 5.2 million more subscribers in the last quarter thanks, it says, to its "strong slate of content."



## 1 TRILLION

Number of people Amazon boss, Jeff Bezos, thinks will eventually colonise space using reusable rockets... ones built by his privately-owned spaceship company, Blue Origin, presumably.



## 2020

The year when Adobe will stop supporting Flash. The company made the announcement in July. At one stage Flash could be found on 98% of internet-connected computers. Now it's only used on 17%. It's gradually being supplanted by more open and efficient web standards, such as HTML5.



## 165

Average speed, in miles per hour, of the world's fastest drone. The RacerX, designed and built by Drone Racing League engineers, was awarded a Guinness World Record for the fastest ground speed by a battery-powered, remote control quadcopter in July. Its peak speed was 179.3mph

## \$200

Price of Oculus Rift's first standalone VR headset, which will be launched next year. The wireless headset – codenamed Pacific – is optimised for portability, and you won't need to hook it up to a smartphone or a PC to be able to use it.



# >> Incoming

The hottest new Windows hardware on the horizon



## Apple HomePod

Price \$349, [www.apple.com](http://www.apple.com)

With a new version of iTunes coming to the Windows Store at the end of the year, now's the time to look at another upcoming Apple product: the HomePod.

Designed to compete with Google Home and Amazon Echo, the HomePod is a smart, multi-room speaker that not only enables you to play any one of 40 million songs from Apple Music just by asking Siri; You can also ask it to control other smart devices, including smart thermostats, lights and other gear.

The really clever thing about the HomePod, though, is its combination of room-sensing and beamforming technologies, which enables the speaker to 'tune' itself to the space it's in and deliver high quality, room-filling sound accordingly. You can also link several HomePod speakers in different rooms together using AirPlay 2 for whole house sound. Available December.



# PICK YOUR PERFECT REINSTALL

There many ways to reinstall Windows. Nick Peers helps you choose the right one, whether you're reinstalling Windows 7, 8.1 or 10

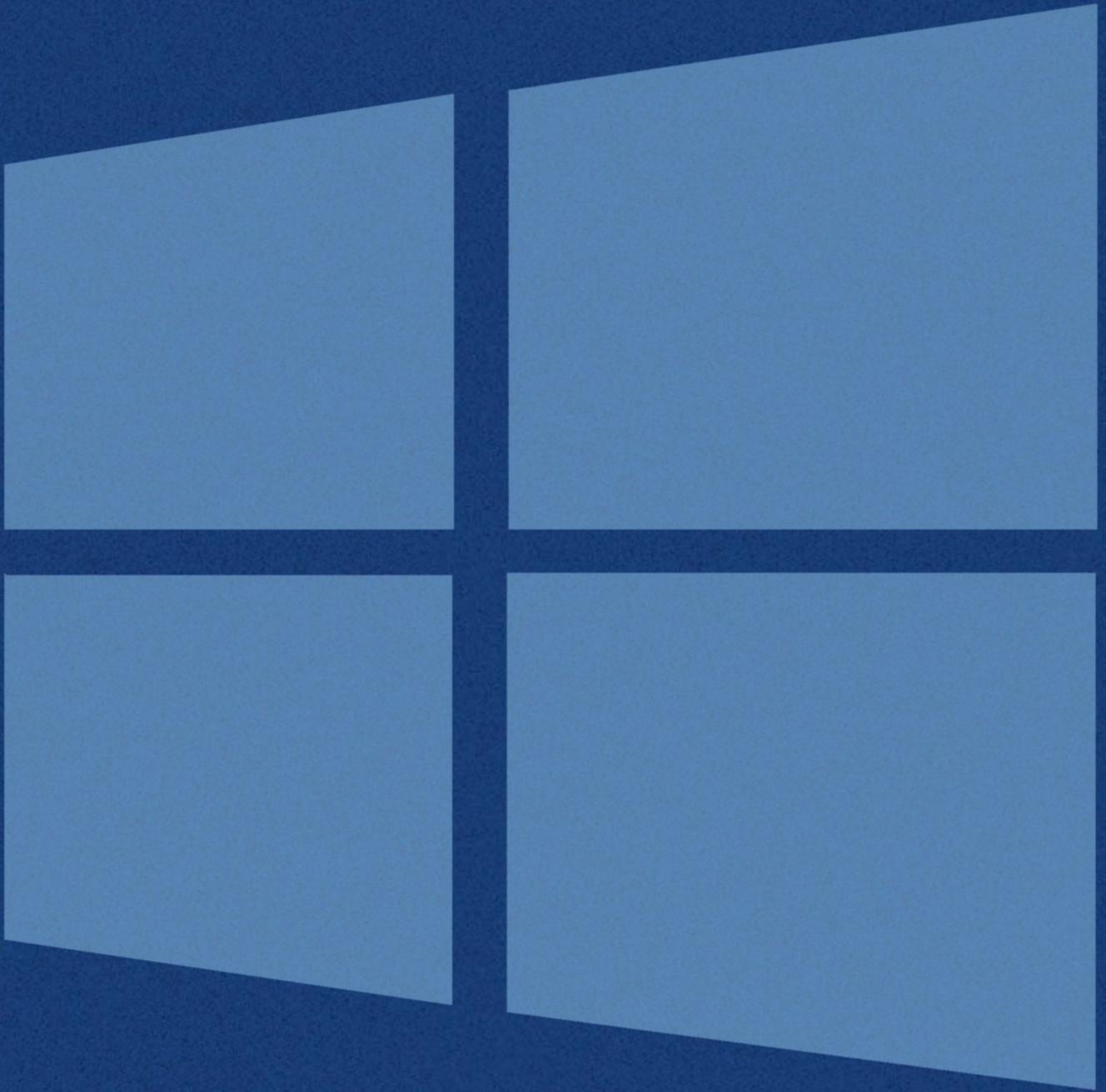
**R**einstalling Windows is like death, taxes and washing up – try as hard as you might, you can't put it off forever. The reinstall process is traditionally associated with giving your PC a major clearout – restoring it to its halcyon days when it fairly flew through the tasks you put in front of it. But reinstalling Windows can also fix any non-hardware problems, remove corrupt files and misbehaving programs to give you back control of your PC.

Not all reinstall processes are the same, however. In this feature, we'll look at five different scenarios. There's the repair install that fixes minor problems without affecting your programs, files or settings, as

well as the more familiar destructive install that removes everything and gives you a clean slate. But we'll also touch on reinstalling from recovery partitions, downgrading your version of Windows to an earlier version and setting up a dual-boot setup that allows you to run two different versions of Windows side-by-side.

Oh, and because reinstalling can be a dangerous business, we'll also reveal all the tips and tricks you need to back up all your data and settings, along with what to do to bring it all back again once the reinstall process has finished.

Long story short, once you have finished reading this feature you'll be armed with everything you need to know about reinstalling Windows. Let's get started...

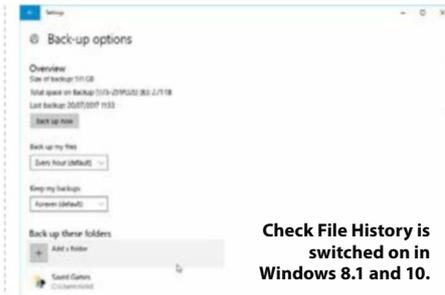


# Before you reinstall

Don't even think about pulling the reinstallation trigger without first having protected all of your files and settings

**A** full reinstall is a destructive process – everything on your C drive will be wiped clean as a result. Even if you perform a repair install, there's still the danger that it won't fix your problem and might even make things worse, preventing you from getting at your data. Therefore, it's important to take steps to protect your personal files and maybe your preferences and system tweaks too.

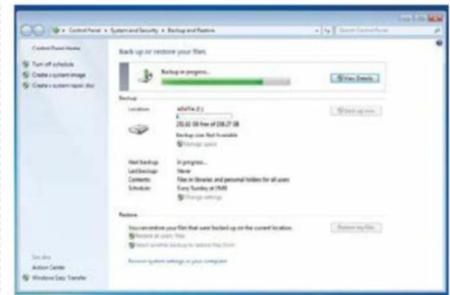
Step one is to look after your personal data: documents, photos, videos and so on. By default, these are stored inside your personal user folder on the same drive as Windows itself. So if you've not moved these folders on to another drive, it's critical you back them up now. Windows has all the tools you need: Backup and Restore in Windows 7, 8.1 and 10; and File History, which is limited to Windows 8.1 and 10.



Check File History is switched on in Windows 8.1 and 10.

## USE FILE HISTORY

If you've not already set either up to back up your data, now is a good time to start. File History is the better tool if your version of Windows supports it, as it makes it easy to roll back your data to an earlier point in its existence as well as saving the latest version. Set it up via Settings > 'Update & recovery' > Backup (Windows 10) or Control Panel > System and Security > File History (Windows 8.1), then make sure it's backing up the



folders you want it to and that at least one full backup has been performed.

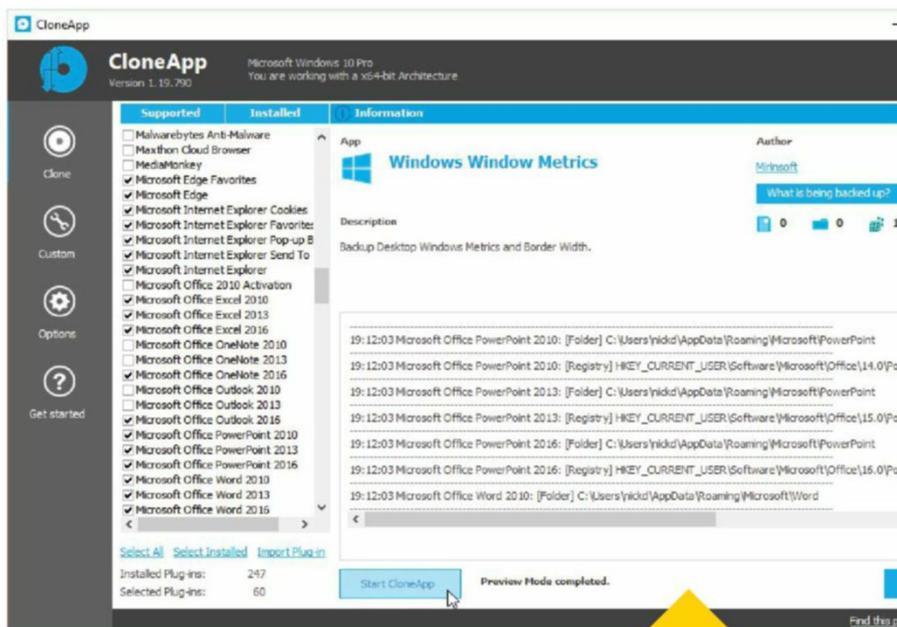
The Windows Backup and Restore Tool (type 'sdclt.exe' to access it via the Run dialogue box) is straightforward to set up too – just click 'Set up back-up' to get started if you haven't already; if you are using it, open it and take a new backup immediately prior to reinstalling to ensure your backup is fully up to date. Like File History it can store multiple versions of the same file, but fewer revisions are stored.

## BEYOND YOUR DATA

The 'Back up your program settings' box on the left tells you how to back up your program settings using a free program called CloneApp – if you're struggling to track down a program's settings, check its support pages or forums online, or start your search under the C:\User<username>\AppData and C:\ProgramData folders as well as the app's own folder under C:\Program Files or C:\Program Files (x86). Also open the Registry Editor (type 'regedit' into the Run dialog) and look under the HKEY\_CURRENT\_USER\SOFTWARE Registry key for any subkeys related to your apps.

What happens if you miss a crucial file or setting? This is where your final backup – a fail-safe drive image – comes in. You can click 'Create a system image' in the Backup and Restore Tool or – if you want greater flexibility – we recommend installing Macrium Reflect Free from [www.macrium.com/reflectfree.aspx](http://www.macrium.com/reflectfree.aspx). Once installed, launch the program and click 'Create an image of the partition(s) required to backup and restore Windows' to get started.

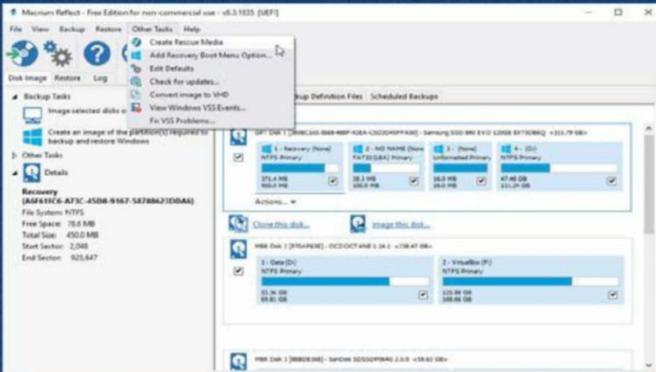
Macrium Reflect Free is also a lifesaver if you've come to this feature locked out of Windows Files and with no backup in place – follow the step-by-step guide on the facing page to create DVD or USB flash drive rescue media and recover your data before wiping your PC's main hard drive and reinstalling Windows.



## Back up program settings

If you'd like to transfer selected program settings from old installation to new, download the portable CloneApp tool ([www.mirinssoft.com](http://www.mirinssoft.com)) to your backup drive. Once complete launch the tool by right-clicking CloneApp.exe and choosing 'Run as administrator' and go through its list of 247 supported apps to see if yours are there. If any are, tick the box beside each one you want to save the settings for. If any apps aren't covered – or you want to back up additional settings – then choose Custom where you manually specify the files, folders and Registry keys where your program settings are stored.

### Take a failsafe backup



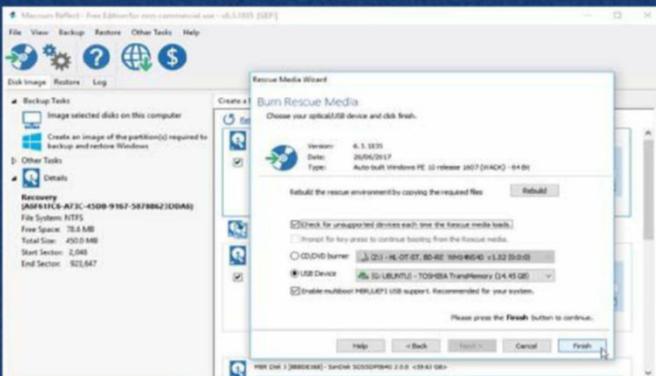
#### 1 First steps

If you don't have Macrium Reflect Free, install the program on another PC. On first launch, opt to create the rescue media when prompted or choose Other Tasks > Create Rescue Media – you'll need a blank DVD or (preferably, because it's quicker) an 8GB USB flash drive.



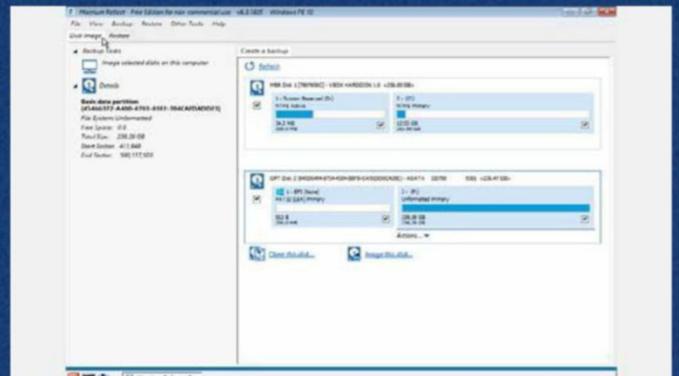
#### 2 Generate PE image

Macrium will suggest a PE version that matches the PC it was installed on – if this is running a different version of Windows, click 'Change PE Version' to choose the correct one. Click Next twice, select your type of Windows (32-bit or 64-bit) and click Next to build the PE image.



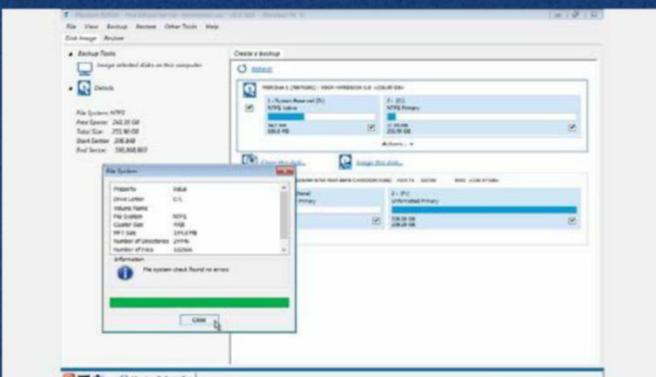
#### 3 Create rescue media

If an update is found, click Next again to apply it. Once the image is created, select your target device (DVD or USB). Tick both boxes and click Finish. Wait for the media to be created, then eject the drive safely and insert it into your afflicted PC.



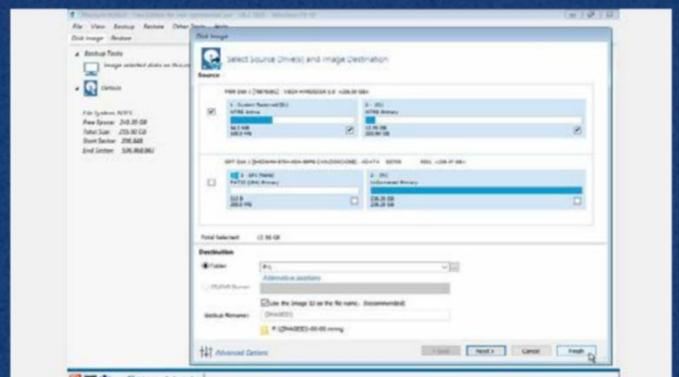
#### 4 Boot from rescue media

Make sure your backup drive is connected and has plenty of free space. Boot from your Macrium rescue media – ignore any prompt to load network drivers. Once loaded, switch to the Disk Image tab where you should see both your non-booting system drive and your backup drive.



#### 5 Quick-fire actions

Click on your afflicted Windows partition – an Actions drop-down menu will appear. Click this and choose 'Analyse File System' to check for errors. If none are found, make sure only the partitions on your system disk are ticked, then click 'Image selected disks on this computer'.



#### 6 Back up everything

Click the ellipsis (...) button next to Folder to select your backup drive. Then click Advanced Options, select Auto Verify Image and tick the 'Verify image or backup file directly after creation' box before clicking OK followed by Finish. Your drive and its contents will now be backed up. ■

# Repair a Windows install

If you're trying to fix a problem, a refresh or repair install may be the best route to go down. Here's what you need to do...

**N**ot all reinstalls require a complete wipe of your hard drive. A repair or refresh installation leaves your programs, settings and files in

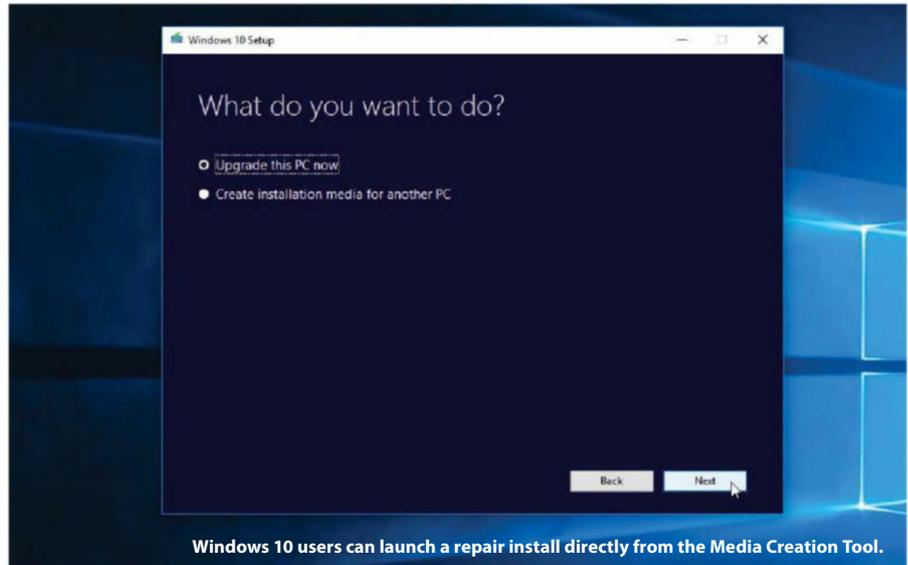
place, and restricts itself to installing a fresh copy of your Windows files over the top of your existing copy. If your problem is linked to a corrupt file or Windows setting, the repair installation can usually fix it.

All repair installs share one common characteristic: you must launch them from Windows itself. You can't boot from your install media and repair Windows through that; you need to boot into Windows, then start the repair process from there. If you're unable to boot into Windows, therefore, you'll need to skip to page 20 and perform a full destructive recovery instead.

## Start the repair

Starting a repair install varies depending on your PC model and what version of Windows you're running. Windows 8.1 and 10 users should (at least initially) avoid the Refresh/Reset options provided under Settings > 'Update and recovery'. These options will preserve your files and any apps you've installed through the Windows Store, but any desktop programs you've installed will be wiped along with Windows itself.

Instead, you should 'upgrade' your copy of Windows, which performs a

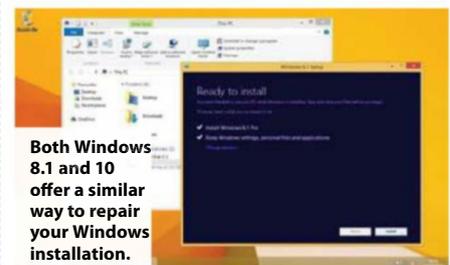


Windows 10 users can launch a repair install directly from the Media Creation Tool.

similar non-destructive reinstall to reset/refresh with the added bonus that all your programs – including those you've installed outside of the Windows Store – will be preserved. To do so, you'll need your Windows installation media – see the step-by-step guide on page 17 if you don't have the latest version of it.

Why do you need the latest install media? It's because upgrade installs only work if the version of Windows on your PC matches that on your install media, so if you've installed Service Pack 1 in Windows 7, for example, you need up-to-date installation media to avoid

the laborious task of first attempting to uninstall Service Pack 1 through Windows Update (assuming that you're able to), then reinstalling Windows and



Both Windows 8.1 and 10 offer a similar way to repair your Windows installation.

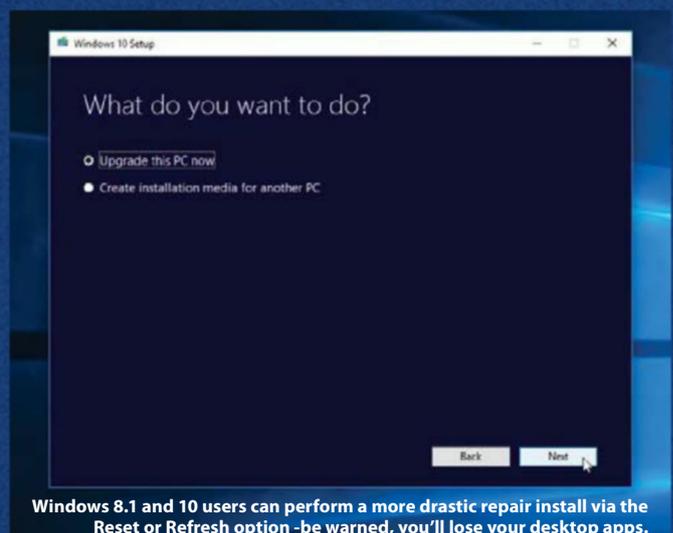
## Post repair steps

Start by stress-testing your desktop to verify that everything works as it should – sometimes the repair can introduce more problems than it solves, in which case if you're running Windows 8.1 or 10 you can undo the changes. Go to Start > Settings > 'Update & recovery' > Recovery and look for an option to go back to your previous version – click 'Get started' and then follow the prompts.

If the repair doesn't appear to fix your underlying problem, Windows 8.1 and 10 users can take one more intermediate step – the reset or repair. It will

see you waving goodbye to all those desktop programs you've installed (including Office and your third-party security software), but it will preserve your Windows Store apps, files and Windows settings. Leave your install media inserted, then head over to the 'Update & recovery' > Recovery section under Settings. This time, click the 'Get started' button under the Refresh (Windows 8.1) or Reset (Windows 10) option and follow the prompts.

If this more drastic approach doesn't work, or you're running Windows 7, then to page 20 for destructive reinstall options.



Windows 8.1 and 10 users can perform a more drastic repair install via the Reset or Refresh option -be warned, you'll lose your desktop apps.

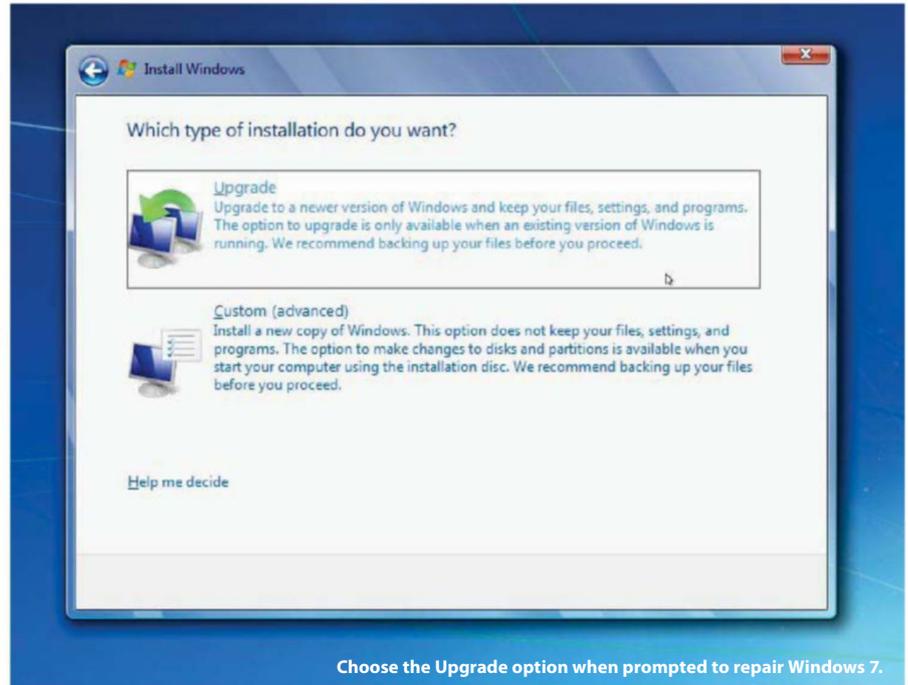
then downloading and reinstalling Service Pack 1, along with all of your other updates.

Windows 10 users can also launch the repair process directly from the Media Creation Tool by choosing Upgrade when prompted, but given the amount of time it takes to download the files, you might as well create your install media instead – just in case the upgrade install doesn't work and you decide to go down the path of a full-blown destructive install.

### Launch the repair process

The procedure from this point onwards varies according to which version of Windows that you have. If prompted to download updates, do so to save time post-install.

Windows 8.1 and 10 users will be asked what they want to keep. Windows 8.1 users should find settings, personal files and applications are selected by default (click 'Change settings' if this isn't the case), while it's 'Keep personal



“Start by seeing if the specific issue has been solved, then check to see that the rest of Windows still works”

files and apps' in the case of Windows 10 (don't worry, in this circumstance, 'apps' also applies to any desktop programs that you have installed).

Windows 7 users need to pop in their install media, double-click setup.exe and follow the regular reinstall process. When prompted, click 'Go online to get the latest updates for installation (recommended)' to download post-SP1 security fixes now, then accept the licence agreement and choose 'Upgrade' when prompted.

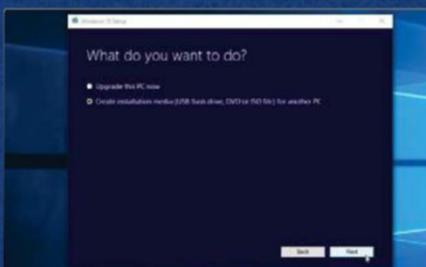
The upgrade process can take up to an hour on whichever version of Windows you're repairing, even on the fastest machine, so be patient. Your PC will reboot several times. If you're reinstalling Windows 7, you'll be prompted to enter your product key again, so have it handy.

Windows 8.1 and 10 will relaunch with the same setup wizard you'd see when upgrading from an earlier version of Windows. It's all very straightforward, but don't skip through the Express

settings when prompted; make sure you review all settings to lock down privacy.

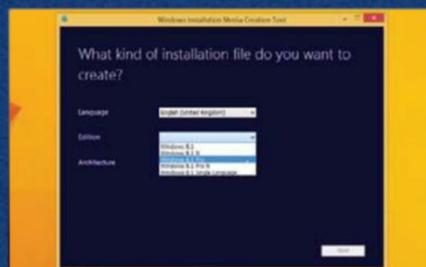
If all goes well, you should find yourself at the desktop, ready to see if your problem has been fixed – start by seeing if the specific issue that you were experiencing before has been solved, then check to see that the rest of Windows still works as it should – if it's not, follow the advice in the 'Post repair steps' box on the facing page. There's also a possibility – particularly with Windows 7 – that the repair install will result in a non-booting PC. If this happens, it's time to dig out the rescue media you created using Macrium Reflect Free and use it to restore the drive image you took before embarking on the repair process. Then turn the page for more destructive options.

## Get the latest install media



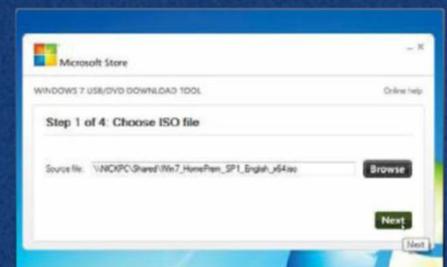
### 1 Windows 10

Head to [www.microsoft.com/software-download/windows10](http://www.microsoft.com/software-download/windows10) and click 'Download tool now'. Once downloaded, open MediaCreationTool.exe. When prompted, select 'Create installation media' and follow the prompts to create a USB flash drive or an ISO file (for burning to DVD).



### 2 Windows 8.1

Download the Media Creation Tool from [www.microsoft.com/software-download/windows8](http://www.microsoft.com/software-download/windows8) – input your language, edition of Windows 8.1 and PC architecture (32-bit or 64-bit) and then click Next. Choose to create either a USB flash drive or an ISO file and then follow the prompts to the end.



### 3 Windows 7

Go to [www.microsoft.com/software-download/windows7](http://www.microsoft.com/software-download/windows7) and enter your product key – choose a 32-bit or 64-bit version as required. Once downloaded, double-click the file to burn to DVD, or use the Windows USB Download Tool (<https://wudt.codeplex.com>) to create a USB flash drive.

# A full, destructive reinstall

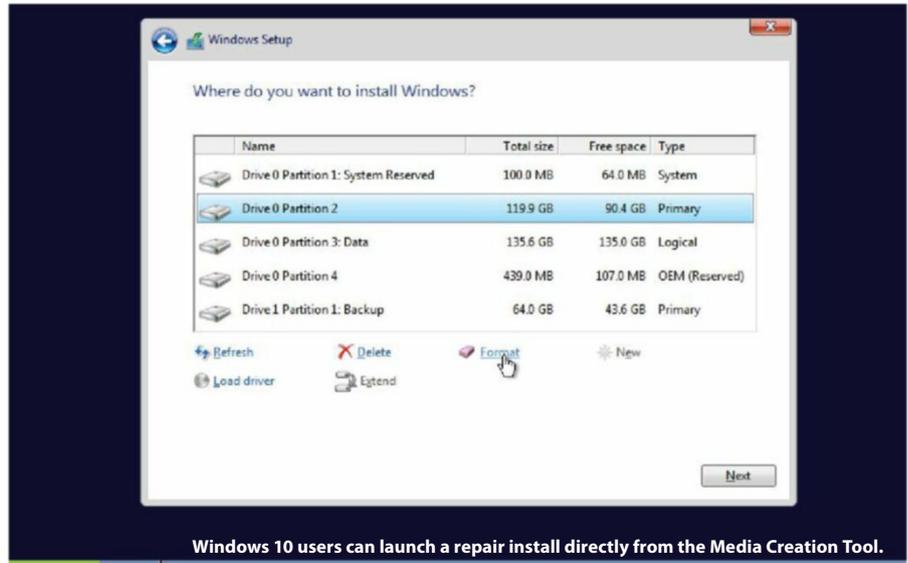
If you're looking to wipe the slate clean, or need to recover from major issues, the nuclear option is always the best one

**R**einstalling Windows from scratch – namely, wiping your system drive completely clean to install a brand, spanking new (and fresh) version

of Windows on to it – is the ultimate choice for anyone looking to revive a slow PC or resolve a major, non-hardware issue. In this section of the feature we'll step you through the entire process – if you're looking to reinstall an older version of Windows, or explore other reinstall options, turn to page 22.

Before you begin, make sure your PC is fully backed up by following the advice in the first section of this feature. A full reinstall really is destructive – nothing left on your C drive will exist once you've finished. You should also follow the step-by-step guide on page 17 to ensure you have the latest installation media for your target version of Windows. This will ensure a cleaner, more up-to-date installation from the off, thus saving you time bringing it fully up to date once the installation has completed.

It's also worth sourcing networking and graphics drivers now rather than relying on Windows to provide them for you – in most cases, they should be built in, but not always. Consult your PC or motherboard manufacturer's website for these, or visit your Wi-Fi adapter or graphics card manufacturer's site – download them to your backup drive.

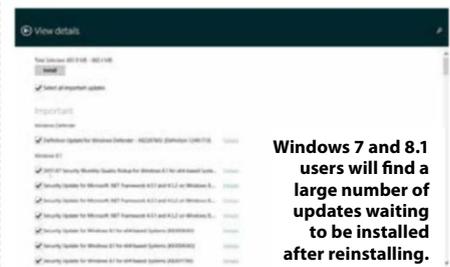


Other things to consider: uninstall any products that require activation now – this should deactivate the licences and allow you to use them with your new install without any issues. Also, be sure to have product keys and program installers to hand.

## STARTING THE REINSTALL PROCESS

A full destructive reinstall should always be started by booting from your installation media, be it a DVD or USB flash drive. Check the step-by-step guide on page 17 for some pointers. The

actual reinstall process doesn't differ much across Windows 7, 8.1 or 10. You'll be asked to verify your language, location and keyboard are set correctly,



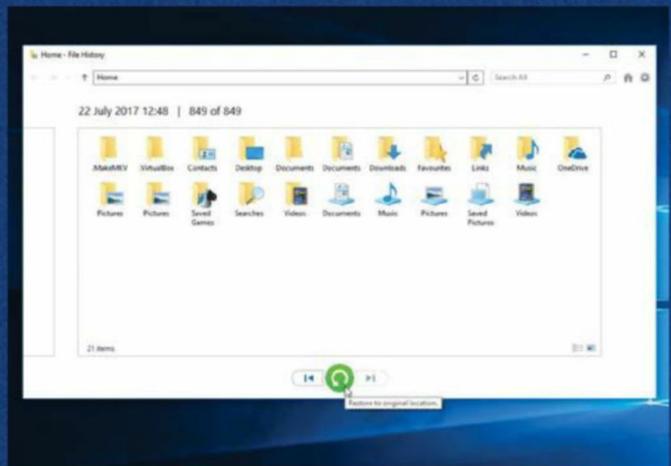
## Restore programs, settings and data

Once Windows is reinstalled, open Windows Update to bring Windows fully up to date – don't be surprised if there are hundreds of updates still to apply in the case of Windows 7 and 8.1. Once it's fully up to date, consider reinstalling Macrium Reflect Free and taking your first drive image – a vanilla backup you can restore in future instead of reinstalling Windows itself.

Next, it's a case of reinstalling your core apps. Once in place, open CloneApp from your data drive. If you click the Restore button, every single program setting you

backed up will be restored – if there are any backup settings you don't want to restore, select Options to locate the backup folder, then open it and move any program folders you want to ignore out of the folder temporarily before clicking the Restore button. Now, take your second Macrium Reflect backup – a 'perfect' snapshot, as it were.

Finally, open File History or the Windows Backup and Restore tool and take steps to restore any data you backed up, then make sure the tool is configured to carry on backing up going forward.

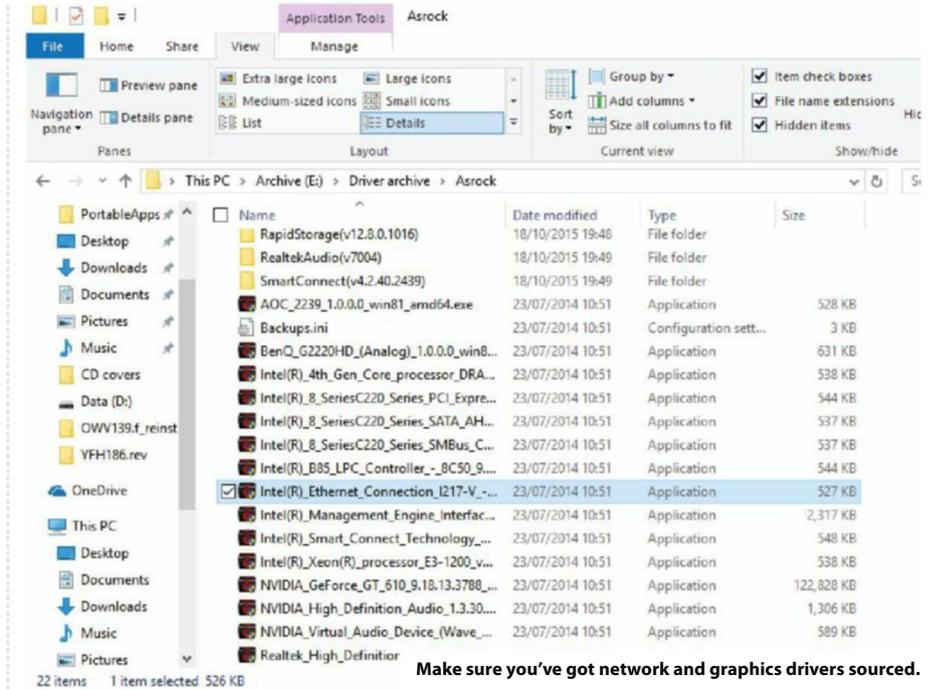


Open File History, link it to your previous backup and then you can restore all your data back to its original location with one click.

then it's a case of clicking Install Now. If prompted, enter your product key or click Skip if you're running Windows 10 on a PC you upgraded during the free period. When asked what type of installation you wish to perform, choose the Custom option.

Next comes potentially the trickiest part of the process. A list of drives and partitions will appear – you need to select the one Windows is currently installed on. By default, it should be detected and selected, but verify it's correct before clicking Format (click the advanced Drive Options button if it's not visible). Click OK, then once formatted, verify the drive is still selected and click Next.

That's the technical stuff pretty much done. You'll see a checklist of tasks to be performed – just sit back and wait. One thing: when Windows reboots, you may see the 'press any key' prompt again to boot from CD or DVD. Don't press anything to let the installer continue.



“Next comes potentially the trickiest part of the process. A list of drives and partitions will appear – you need to select the one Windows is currently installed on”

### SET UP POST-INSTALL

The post-setup prompt begins with Windows 7 users being prompted for their product key, then it's a case of setting up a user account and you're off and running. Windows 8.1 users will get an Express Settings prompt – be sure to click the option to customise these and go through them carefully.

Post-Creators Update, Windows 10 no longer gives you an Express Settings option. For now, confirm your location and keyboard, set up your network if

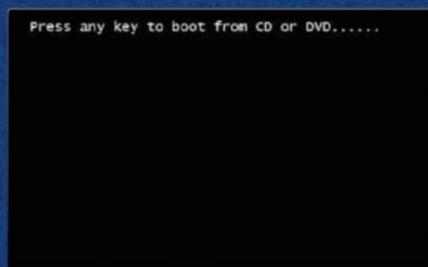
required and choose 'personal use' when prompted. You can either sign in with your Microsoft account or click 'Offline account' > 'Maybe later' if you plan to stick with the old-style Windows 7 local user account.

If you opt for the Microsoft account option now is a good time to set up a PIN to speed up future logins (note: the PIN is tied, specifically, to this PC, and you can always bypass it using your regular account password should you forget it at any point).

You'll then be asked to set up Cortana – this is where Windows 10's notorious privacy settings come into play, so review all of the options carefully, flicking the slider to Off for any you don't need or use.

That's the end of the setup process – Windows will now configure itself based on each of your choices and you'll see a series of messages appear on-screen. Eventually, when all is ready, you'll find yourself back at the familiar Windows desktop screen.

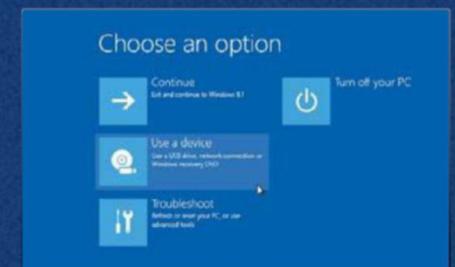
### Start the install process



**1 Reboot for media**  
If you're running Windows 7, or have Fast Boot disabled, insert your boot media and start your PC. Look for a 'Press any key to boot from CD or DVD' option (even if you've booted from a USB flash drive) – press the key and you should find the Windows install process starts.



**2 Tweak boot options**  
If you boot back into Windows, restart your PC again, but this time press a key, such as [F11], when prompted to open a boot menu. Do so, select your boot media (choose UEFI if the option appears) to boot; otherwise, enter setup to change boot device order.



**3 Windows 8.1/10**  
If Fast Boot is enabled, open Settings in Windows and navigate to 'Update and recovery' > Recovery, then click 'Restart now' under 'Advanced start-up'. When the boot options appear, choose 'Use a device' to select your USB flash drive or DVD from the list.

# Other reinstall options

Get the lowdown on three further techniques: reinstall from a recovery partition, downgrade Windows and set up a dual-boot system

**S**o far, we've covered both traditional reinstall techniques, but there are other reasons – and methods – for reinstalling Windows.

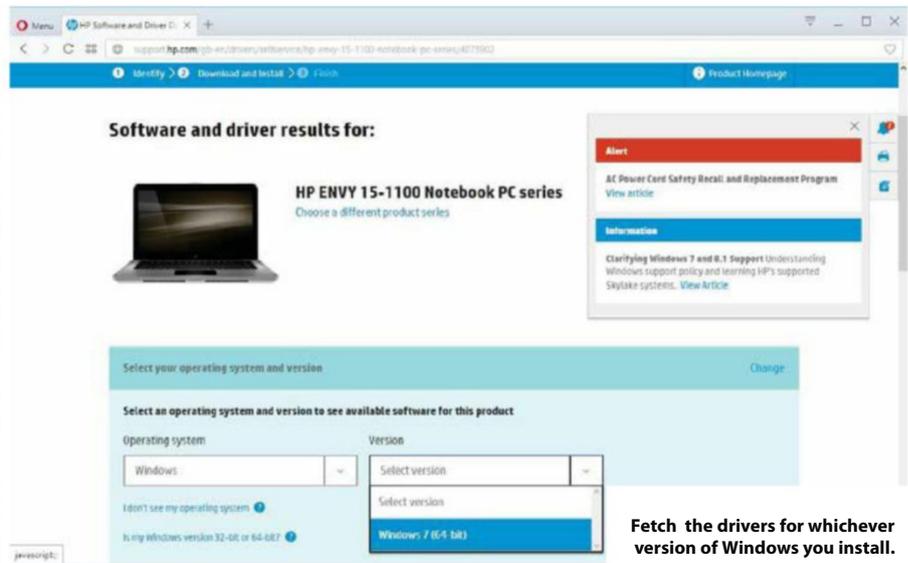
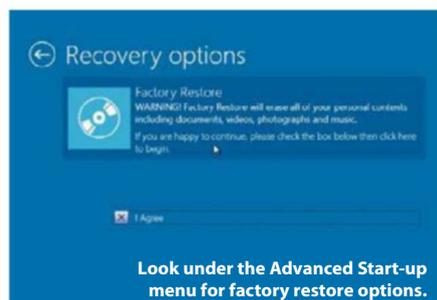
First up is the recovery option. Most pre-built PCs come with a built-in manufacturer's recovery partition that enables you to restore Windows to its factory shipped condition. The main advantage of this method – aside from being cheaper and easier for the manufacturer, of course – is that your PC is restored to a guaranteed working state, with all the drivers it needs to function. The downsides are that a lot of extra unwanted software is usually installed alongside Windows, you need to exercise extreme caution not to lose everything on the drive and that if the recovery partition corrupts – typically due to hardware failure – you're left with no means of reinstalling Windows.

If you're planning to reinstall Windows by this method, look for a prompt to start recovery when you first boot Windows or look for the option under the 'Advanced start-up' menu (see below) – consult your computer's documentation or manufacturer's website for details. Remember that most recovery options are fully destructive, so be sure to have backed up your system before you begin – and that includes creating a complete drive image.

## DOWNGRADE WINDOWS

Another reason to reinstall Windows is to revert to an earlier version. If you're pining for Windows 7 or 8.1, then it's usually possible to downgrade your copy of Windows – remember support for Windows 7 ends in January 2020, and Windows 8.1 in January 2023. Before reaching for your old Windows media, however, you need to do some homework first.

First, if you upgraded your PC to Windows 10 from an older version of



Windows, restoring that version should be straightforward in the sense you can use your manufacturer's recovery partition if it still holds the original version, or you can try installing from an old, unused copy of Windows 7 or 8.1 – just follow the guides to preparing and reinstalling Windows earlier on in this feature. Do source the correct drivers for your PC first, though, and verify that your new software is backwards compatible (desktop apps should be, but Windows Store apps won't work in Windows 7, and some may not work in Windows 8.1 either).

*"If you're pining for Windows 7 or 8.1, it's usually possible to downgrade your copy of Windows"*

If your PC came with Windows 8.1 or 10 preinstalled, then going back to Windows 7 will be trickier and possibly even impossible. Before embarking on this, check the internet to see if others have had similar success. You'll need to source your own Windows 7 installation media and valid licence, and you'll almost certainly need to have access to your PC's UEFI settings – if Fast Boot is enabled, open Settings > 'Update and recovery' and click 'Restart now' under Advanced start-up. When prompted, select Troubleshoot > Advanced Options > UEFI Firmware Settings.

Once inside your PC's UEFI settings you need to locate and change three settings. First, disable the Fast Boot

feature. Second, disable Secure Boot. And finally, look for a CSM (Compatibility Support Module) option and make sure it's enabled. All three settings need to be made to support Windows 7 – if you can't find them, consult with your PC or motherboard manufacturer.

Once done, you should find you're able to boot from your Windows 7 installation media, enabling you to revert to the earlier copy of Windows.

## SET UP A DUAL-BOOT PC

Our final scenario is one where you install two versions of Windows side-by-

side. This is a step for advanced users only, and if you're merely planning to install an older version of Windows next to Windows 10 for compatibility purposes, explore alternative options, namely setting up a virtual Windows 7 machine using a tool such as VirtualBox (www.virtualbox.org), which runs inside your main Windows installation.

If you are determined to dual-boot your setup, the step-by-step guide on the facing page covers the process of installing an older version of Windows alongside your current one.

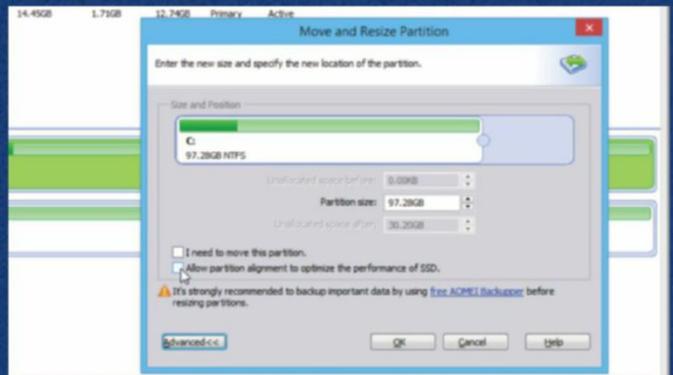
Before you begin also make sure you take a fail-safe drive image using Macrium Reflect Free and be sure to create the rescue media too.

### Set up a dual-boot PC



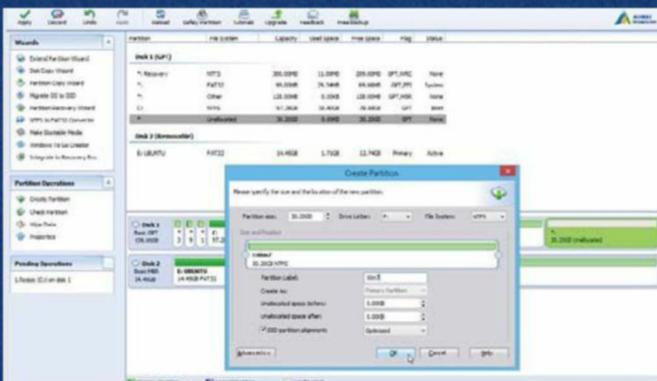
#### 1 Partition hard drive

You'll need to partition your drive to free up space on which to store your copy of Windows. The best tool for the job is AOMEI Partition Assistant ([www.aomeitech.com/aomei-partition-assistant.html](http://www.aomeitech.com/aomei-partition-assistant.html)). Start by clicking Make Bootable Media under Wizards to create rescue media.



#### 2 Shrink main partition

Select your Windows drive (typically C:) and click 'Resize/Move Partition' under Partition Operations. Use the slider to free up at least 30GB space to the right of the Windows partition. If your drive is an SSD, click 'Advanced>>' and tick 'Allow partition alignment to optimize the performance of SSD.' It's strongly recommended to backup important data by using [AOMEI Backupper](#) before resizing partitions. Click OK.



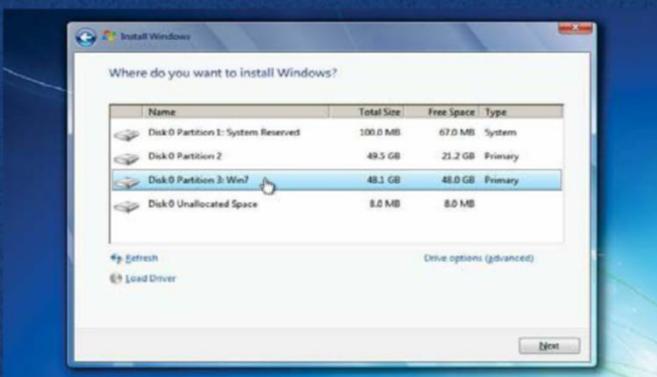
#### 3 Add new Windows partition

Now select the newly created Unallocated space to the right of drive C and click 'Create Partition' under Partition Operations. Verify NTFS is the file system and click Advanced<< to give the partition a suitably descriptive label, such as Win7 before clicking OK. Click Apply > Proceed and reboot.



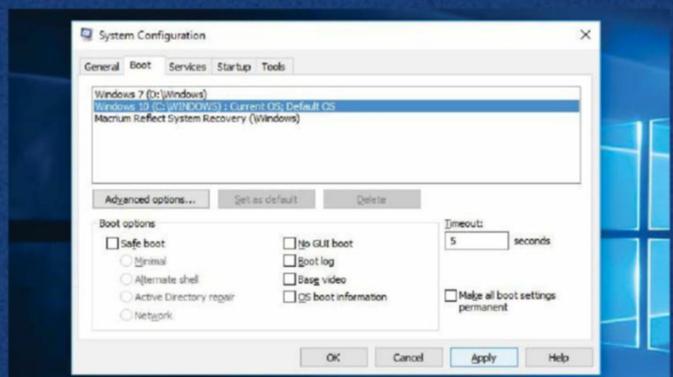
#### 4 Tweak UEFI settings

If installing Windows 7 alongside Windows 8.1 or 10, you may need to reboot into your UEFI (see the main text) to enable the Compatibility Support Module (CSM), plus disable Fast Boot and Secure Boot. Once done, you should be able to boot successfully from Windows 7 installation media.



#### 5 Install new copy of Windows

Once the new partition has been created (check in Windows), reboot using the installation media for your target version of Windows. The install process is almost the same as for a regular Windows installation, but be sure to choose the newly created partition as your target during installation.



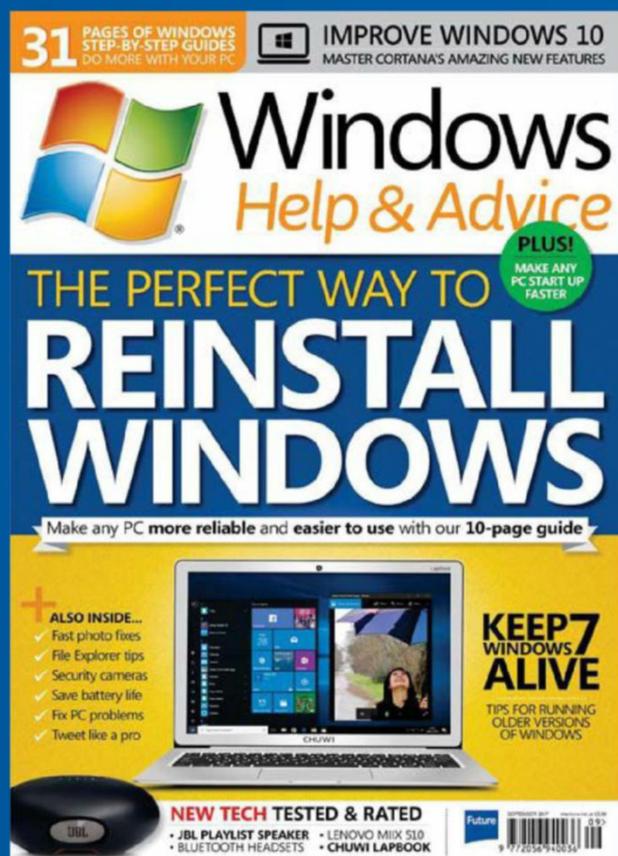
#### 6 Post-install steps

When Windows reboots for the first time you'll see a boot menu appear listing the different versions of Windows you have installed. If the 30-second delay is too long, or you want to change the default, Click Start > Run, type 'msconfig' and hit Enter, then make changes from the Boot tab. ■



# Windows Help & Advice

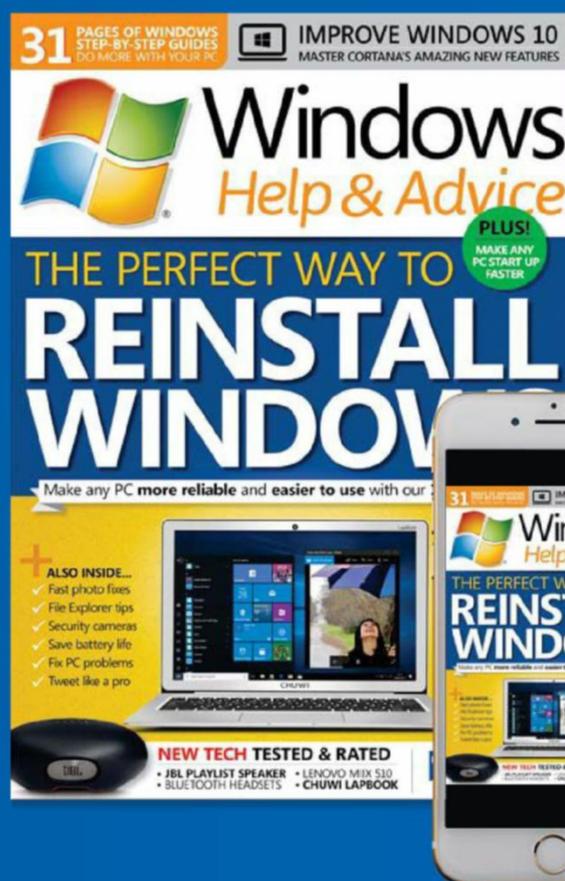
Subscribe to our print edition, digital edition, or get the best value with our complete print and digital bundle



PRINT SUBSCRIPTION  
ONLY **£14**

(Every 3 months by Direct Debit)

Every issue delivered to your door  
at a fraction of the cost



DIGITAL SUBSCRIPTION  
ONLY **£5**

(Every 3 months by Direct Debit)

Instant digital access on your  
iPad, iPhone & Android device



## PRINT + DIGITAL BUNDLE ONLY £18

(Every 3 months by Direct Debit)

- Every new issue in print and on your iPad, iPhone & Android device
- Never miss an issue, with delivery to your door and your device
- Huge savings, the best value for money, and a money-back guarantee
- Instant digital access when you subscribe today

# IT'S EASY TO SUBSCRIBE!

Click: [myfavouritemagazines.co.uk/subwha](http://myfavouritemagazines.co.uk/subwha)

Call: 0344 848 2852

TERMS AND CONDITIONS Prices and savings quoted are compared to buying full priced UK print and digital issues. You will receive 13 issues in a year. You can write to us or call us to cancel your subscription within 14 days of purchase. Your subscription is for the minimum term specified and will expire at the end of the current term. Payment is non-refundable after the 14 day cancellation period unless exceptional circumstances apply. Your statutory rights are not affected. Prices correct at point of print and subject to change. For full terms and conditions please visit [bit.ly/magtandc](http://bit.ly/magtandc). Offer ends 30/9/2017.

Not your average technology website



## EXPLORE NEW WORLDS OF TECHNOLOGY GADGETS, SCIENCE, DESIGN AND MORE

- Fascinating reports from the bleeding edge of tech
- Innovations, culture and geek culture explored
- Join the UK's leading online tech community

[www.gizmodo.co.uk](http://www.gizmodo.co.uk)

[twitter.com/GizmodoUK](https://twitter.com/GizmodoUK) [facebook.com/GizmodoUK](https://facebook.com/GizmodoUK)



# Explore

► WINDOWS TIPS ► INTERNET ADVICE ► EXCITING NEW PROJECTS

## Welcome



**In this month's Explore section we're going to show you some simple techniques**

**for making your PC more productive and easier to use.**

We kick off on page 28 by showing you how to make any PC start up faster; then on page 36 how you can free up storage space by offloading some of the bulkier files on to an external hard drive. We also explain how you can quickly batch rename your holiday snaps on page 42. And on page 48, you'll discover how to make the most of the enhancements to Cortana in the recent Creators Update.

**Rob Mead-Green**  
Editor

rob.mead-green@futurenet.com

## Full listing...

**28** How to make any PC start up faster – it's surprisingly easy!

**32** Boost your social media profile with these essential Twitter tips

**36** Free up space on your PC by adding an external hard drive

**38** Find out how to enhance your photos with Aviary Photo Editor

**42** Discover a quick, and safe, way to batch rename your image files

**46** Manage your computer's energy saver settings

**48** Make the most of Cortana's new Creators Update features

*Your guide*  
*Dan Grabham says...*

"Cortana is now easier to use and more powerful than ever"

*Turn to page 48*  
*to find out more*

**50** Stop websites from tracking you with the Ghostery plugin

**52** Get more from File Explorer



## Our promise to you...

Get more from Windows, software and all your favourite sites

### Packed with informative tutorials

✓ Every issue, we guarantee to pack the magazine with great tutorials teaching you all the best things you can do with your PC. Each article features step-by-step instructions to make learning new skills fast and enjoyable.

### Customise Windows to work your way

✓ We all know how to do the basics but getting the most from Windows isn't always easy. Our dedication to the operating system means you get the very best tips and tricks for all versions of Windows.

### Get more from your favourite websites

✓ We all have our list of favourite sites but often we miss out on great features because they're difficult to use or hidden from sight. We'll show you how to do more online, for a more satisfying web life.

### Discover new programs with our help

✓ From speed-up and security software to superb photo apps, there's always something new to try on your PC. The Windows Store in Windows 10 and Windows 8.1 is packed with software to download.



# Learn how to... Make your PC start up faster



Your guide *Cat Ellis* says...

“Don’t sit around waiting for Windows 10 – here are some tips for making it boot more quickly”

## At a glance

### Skill level...

- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

- Windows 10
- Windows 8.1
- Windows 7

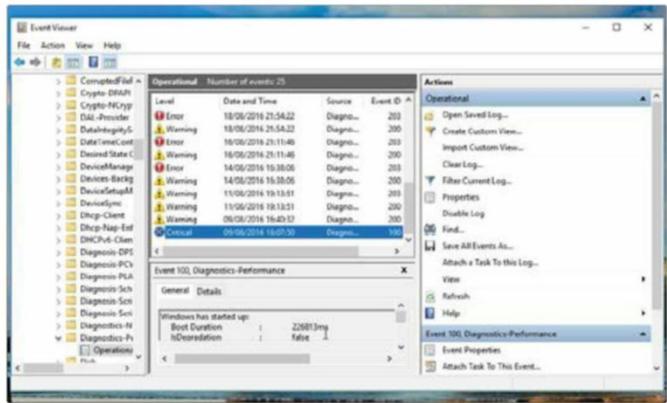
**O**ver time you might notice that the delay between you pressing your PC’s power button and having a responsive desktop is getting longer and longer. It can be enormously frustrating, particularly when you need to get stuck into some important work. You might even be tempted to just leave it switched on all the time, but this means important Windows updates won’t be installed. Thankfully there are ways to speed your PC up again.

We’ll explore several methods here, but it’s also worth noting some of the things that won’t have an effect – despite claims by the makers of some PC optimisation software. Windows 10 does a good job of managing your hard drive, so defragging it is unlikely to have any effect on performance. Similarly, deleting temporary files, uninstalling programs and tidying the Windows registry won’t have a noticeable impact. Here’s what will...

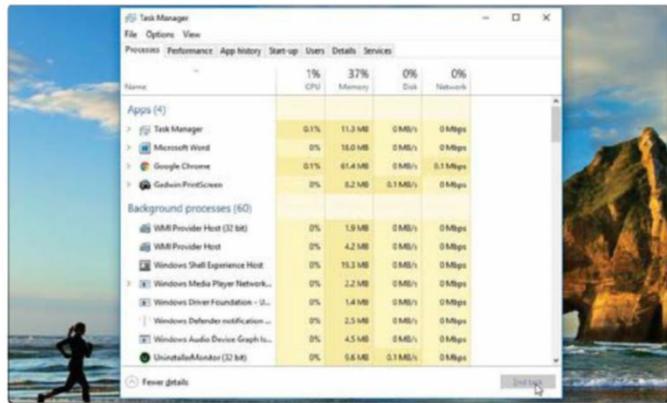
**FAST START-UP**  
This is a little like Hibernate mode. It caches your current Windows session so that it can be reloaded quickly.

**BOOT TIME**  
You can use Windows’ own logs or a program like Bootracer to find out how long it takes Windows to start.

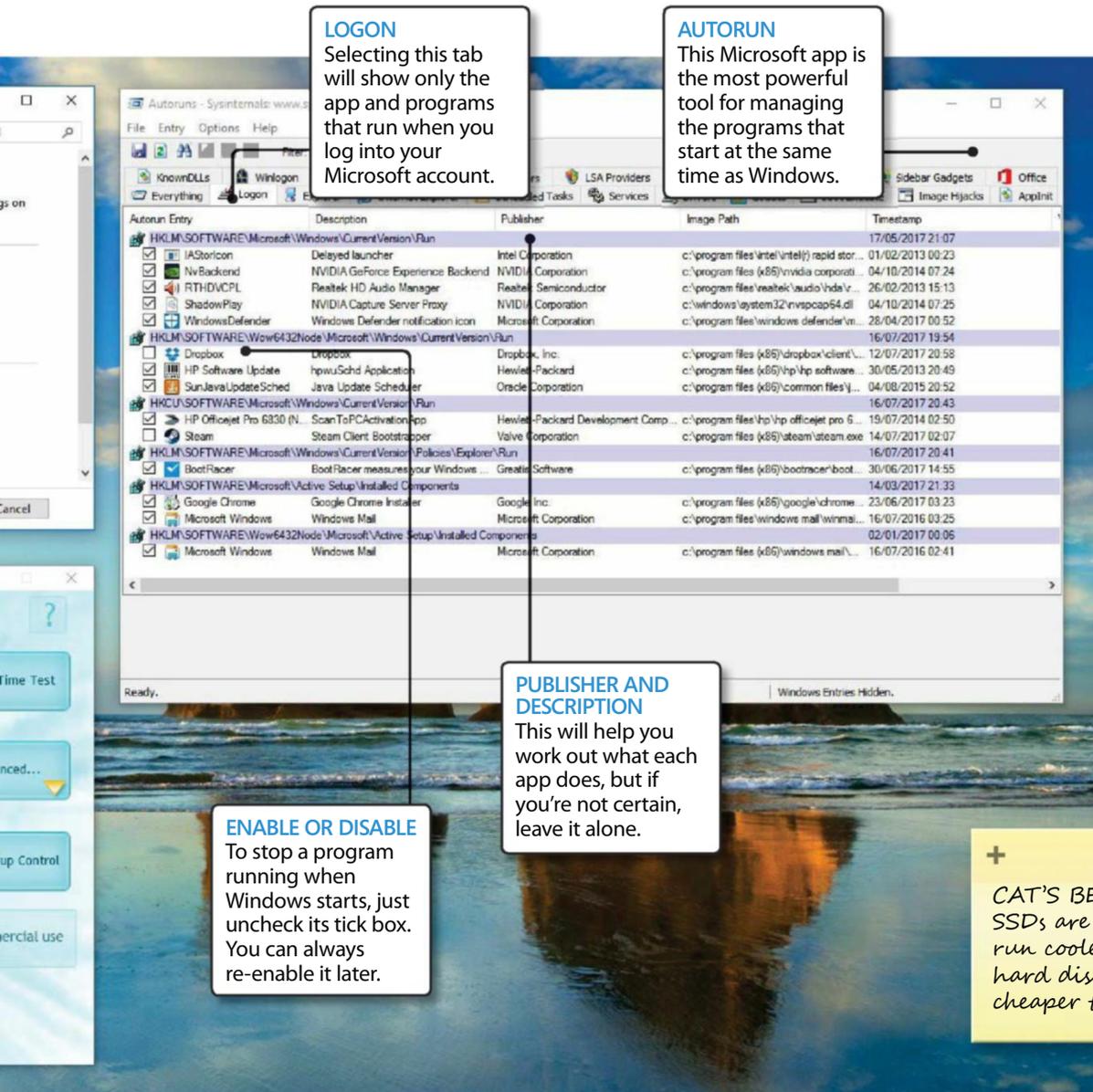
## Step-by-step | Make your PC boot faster



**1 Find your startup time**  
First, type ‘Event Viewer’ into the Search bar, then double-click ‘Applications and Service Logs’ > Microsoft > Windows > Diagnostics-Performance. Right-click the log named Operational, click Open and scroll down the list until you see an event with the ID 100. Click this and look in the small pane below to see the **boot** duration in milliseconds. Make a note of it – we’re going to cut it!



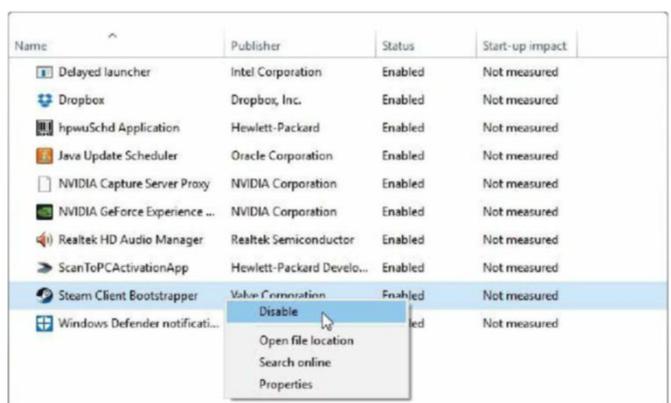
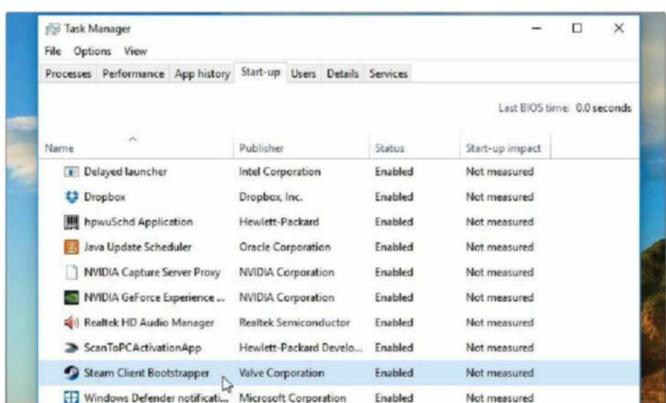
**2 Use the Task Manager**  
When Windows starts, several other programs start up at the same time. Many are necessary for your PC to work correctly, but others are things you don’t necessarily need immediately, and can be started later if you decide you want to use them. To see which programs start at the same time as Windows, you can use the Task Manager. Tap [Ctrl] + [Shift] + [Esc] to see it.



**Jargon buster!**

- ▶ Boot**  
To load the operating system (in this case, Windows 10) into RAM, so it's ready to use.
- ▶ Driver**  
Software that controls a piece of hardware (whether it's internal like a sound card, or external like a printer or display).
- ▶ SSD**  
Solid-state drive – a kind of storage device with no moving parts. They are faster, quieter and more robust than spinning hard disks, but are more expensive per GB of storage space.

**CAT'S BEST TIP!**  
SSDs are faster, quieter and run cooler than traditional hard disk drives. They're cheaper to buy now too.



**3 Check startup programs**  
When the Task Manager opens, you'll see a list of all the apps and processes that are currently running on your PC. Click the Startup tab at the top and take a look through the list of programs that start at the same time as Windows. You'll probably see **drivers** that relate to your graphics card, printer and other devices, along with other applications you don't recognise.

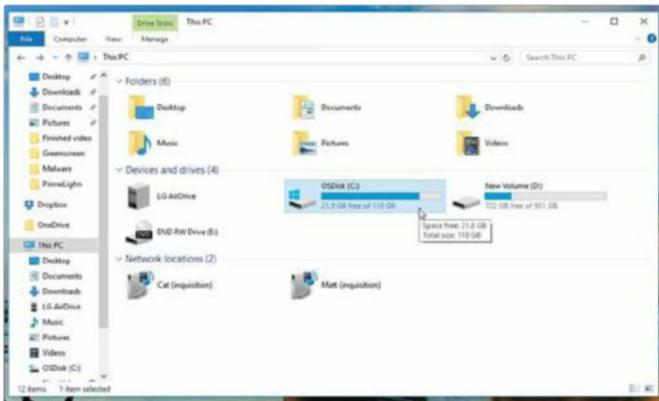
**4 Disable unnecessary apps**  
What you're looking for are programs that you've installed yourself and don't use every day. Here, there's a program called Steam Client Bootstrapper that launches the Steam game platform. To stop a program like this running every time you start your PC, right-click it and select Disable. If you change your mind later, you can always re-enable it via the Task Manager.



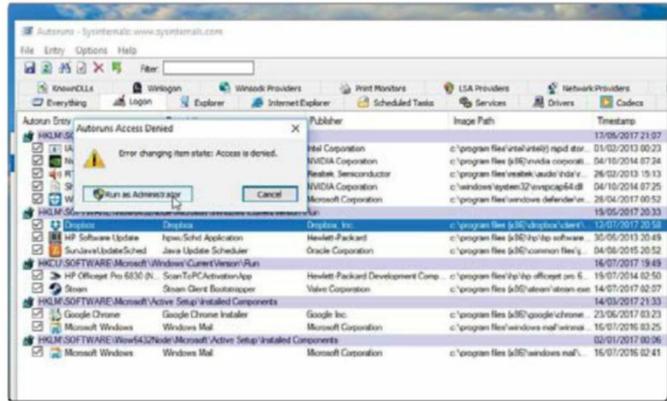
**5 Get a closer look**  
 If you know there are other programs starting with Windows, but you can't see them in the Task Manager, you need Autoruns. This little program from Microsoft identifies many more startup programs, including Windows applications. Download it free from <http://bit.ly/1zJJKYU>, extract the ZIP archive and double-click the file Autoruns.exe.



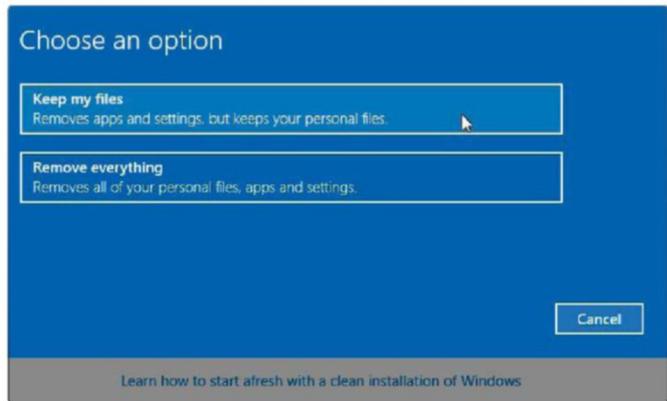
**7 Enable Fast Start-Up**  
 Fast Start-Up is a new tool introduced in the Windows 10 Anniversary Update, and works a little like Hibernate, saving your Windows session in a temporary file that can be loaded quickly when the PC is turned on again. To make sure it's enabled, type 'Power Options' into the Search bar, click 'Choose what the power buttons do' and check the box marked 'Turn on Fast Start-Up'.



**9 Upgrade to an SSD**  
 If you have Windows installed on a hard disk drive, upgrading it to a solid-state drive (SSD) can have a tremendous effect on boot times. You can still keep your files and other programs on the old disk. Unfortunately you can't just transfer Windows across with a few clicks – you'll need to reinstall it on the new SSD. Microsoft has a handy guide here: <http://bit.ly/2TzKzB3>



**6 Disable and save**  
 You'll now see a huge list of programs and processes. As before, you're looking for programs you recognise and know you don't need immediately. Click the Logon tab and uncheck the box beside anything you want to disable. You might be prompted to give administrator permission before you can change anything. When you're finished, click Save and close Autoruns.



**8 Reset Windows**  
 If your PC is taking several minutes to boot, it's time to reset Windows. Type 'Reset' into the Search bar, select 'Reset this PC' and click 'Get started'. You now have three options: Keep My Files; Remove Everything; and Restore Factory Settings. Select the first option – it will reinstall Windows and remove any other apps, but will let you keep your files (it's a good idea to back them up first).



**10 See the results**  
 Once you've finished, shut down your PC, power it back on and check your startup time again. Hopefully you've managed to cut the time significantly! You might want to consider using a third-party app like BootRacer ([www.greatis.com/bootracer](http://www.greatis.com/bootracer)). This tells you how long the boot process takes, and how long it takes for Windows to be ready to use after you've logged in. ■



# Mac FORMAT

Everything you need  
to live the Apple life



**NEW ISSUE ON SALE NOW!**

Available from [www.myfavouritemagazines.co.uk/MACsubs](http://www.myfavouritemagazines.co.uk/MACsubs)

# Learn how to... Use Twitter like a pro



Your guide *Alex Blake* says...

"Twitter is a hugely powerful tool – here, we're going to show you how to make the most of it"

## At a glance

### Skill level...

- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

- Windows 10
- Windows 8.1
- Windows 7

**W**hether you run a website or your own business, you've probably heard 'experts' and 'gurus' telling you that you need to get on Twitter and start promoting your work. And you've probably also tried it yourself. But how do you go from a lonely echo chamber with no followers to having a thriving online community willing to share your posts and promote you to others?

Despite appearances, it's not rocket science. With some careful planning, attention to detail and a bit of patience, you can build your Twitter presence into an invaluable tool for your business or blog.

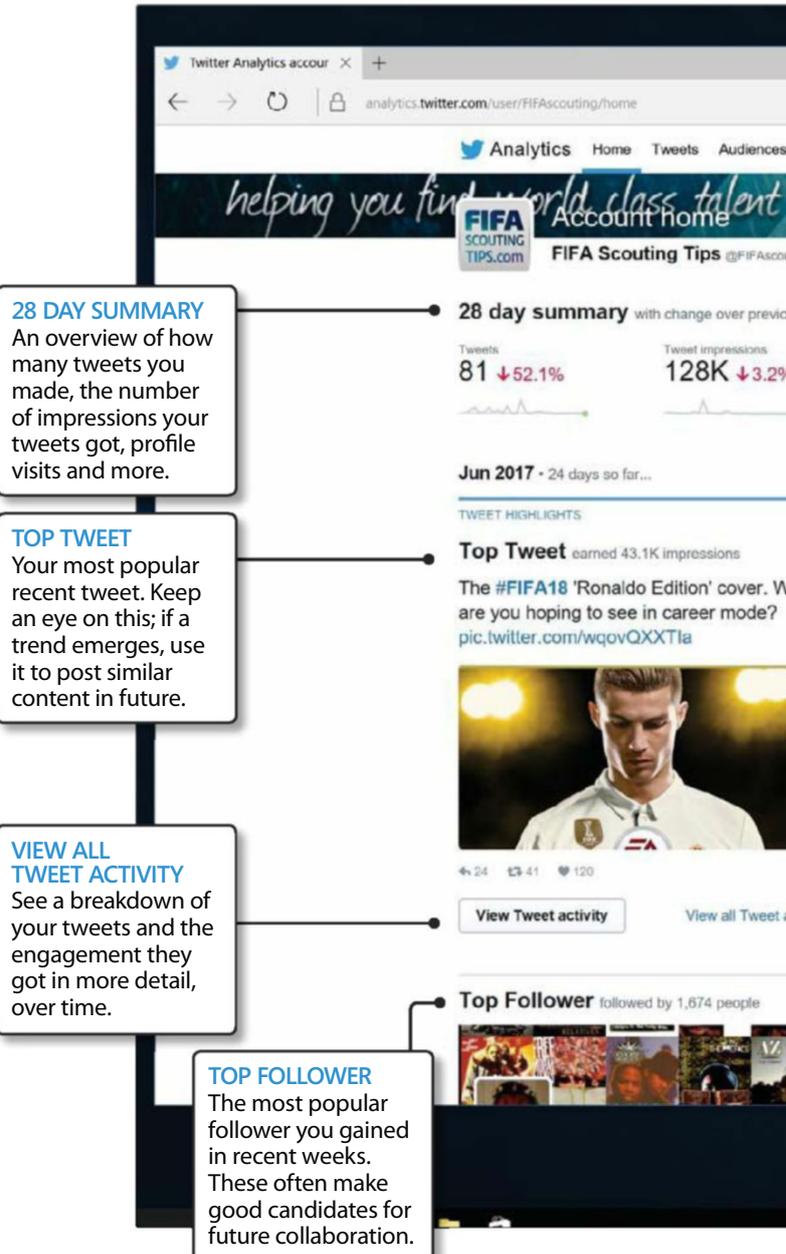
If you've found it difficult so far, don't be discouraged. It can take time to go from zero to hero on Twitter, but the benefits of an engaged audience far outweigh the drawbacks. So let's get stuck in and we'll help you become a true social media specialist...

## Step-by-step | Increase your reach on Twitter



### 1 Encourage engagement

It can be discouraging to post something on Twitter and be greeted with silence. If that sounds familiar, you may be posting the wrong sort of content. The best way to get engagement is often the simplest: ask your readers a question. What did they think of the Champions League final? Did that contestant deserve to win *Bake Off*? Give people a chance to share their opinions.



### 2 Make connections

Famous friends can be useful, but how do you get them? The best way is to offer them something of value. Find the key players in your genre and offer to write for them, or suggest a partnership. Even something as simple as a compliment on their work can help. Make yourself known to them and offer value, and they might share your work; you'll reap the benefits.

### Jargon buster!

#### ▶ Retweet

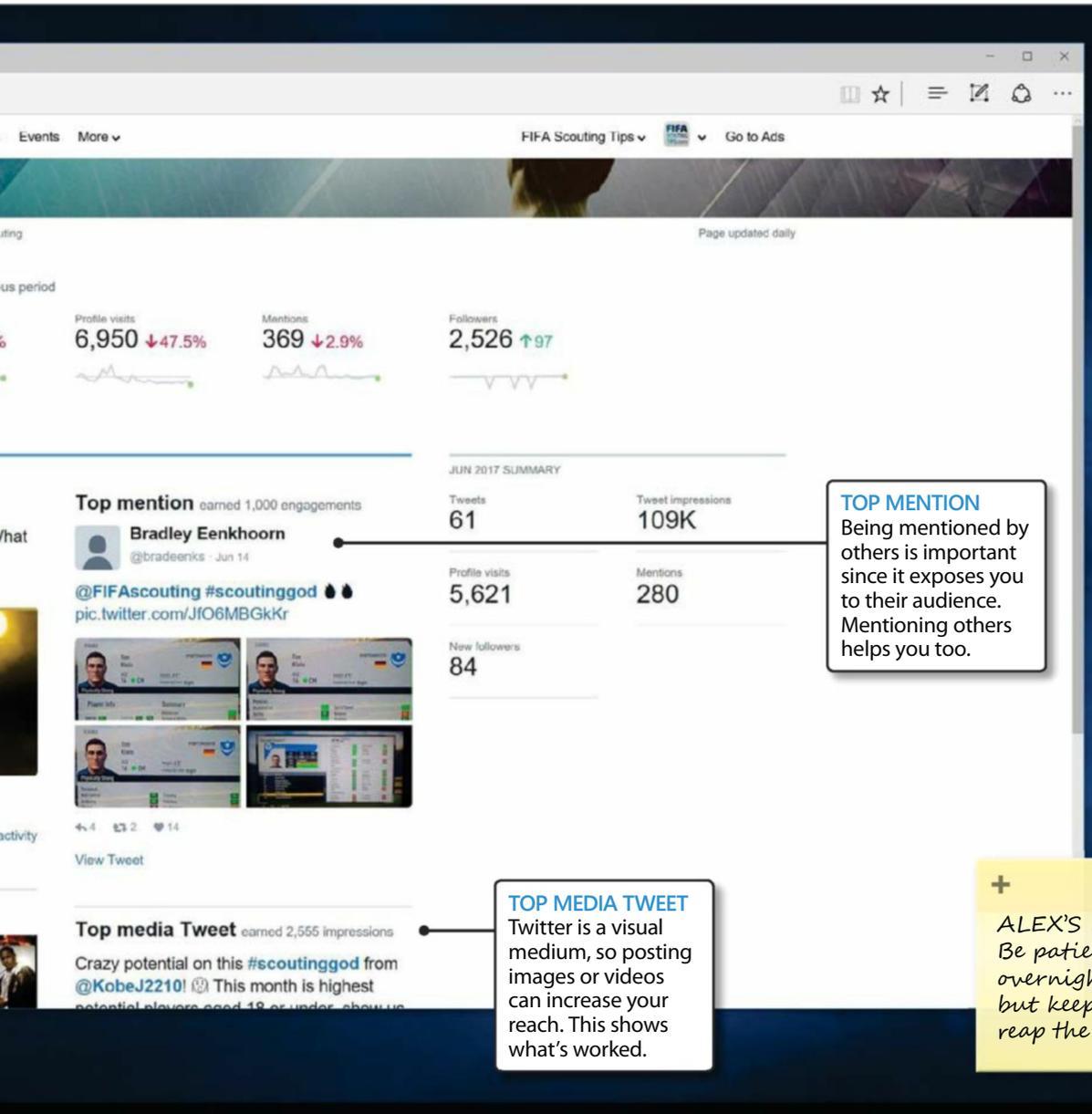
This is when someone shares one of your posts with their own audience.

#### ▶ Hashtag

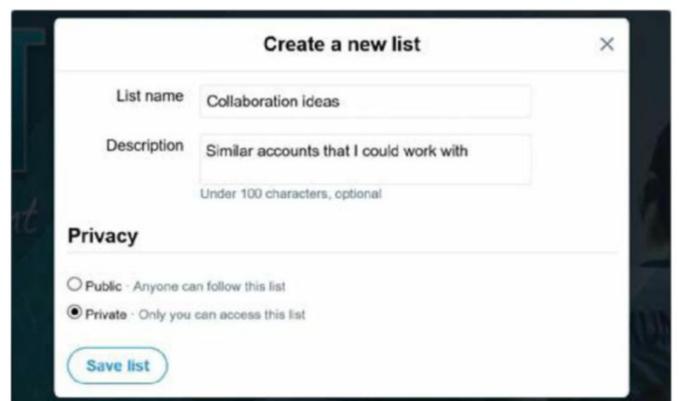
Used to define topics within your Twitter posts, such as #football, #politics, #Rihanna, etc.

#### ▶ DM

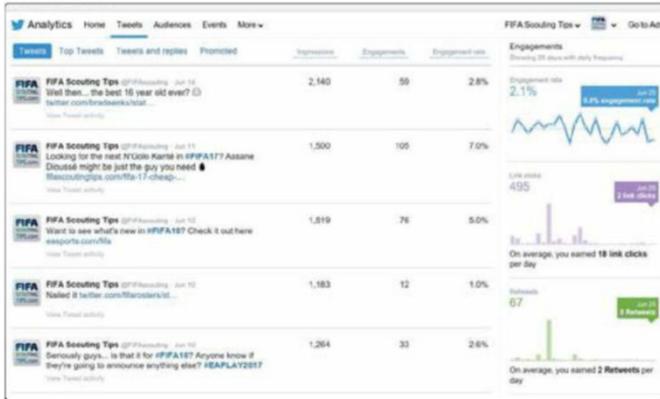
Direct Message. Use it to privately talk to other Twitter users without the general public seeing any of your messages.



**3 Tag similar accounts**  
Got something worth sharing? Twitter lets you tag people in your pictures, and if you're smart you can really boost your reach. Tag similar accounts (that you've already connected with) in your images and they'll get notified. If they like it, they might **retweet** it, exposing you to another set of eyes. Don't overdo it, and only tag accounts you know to avoid seeming spammy.



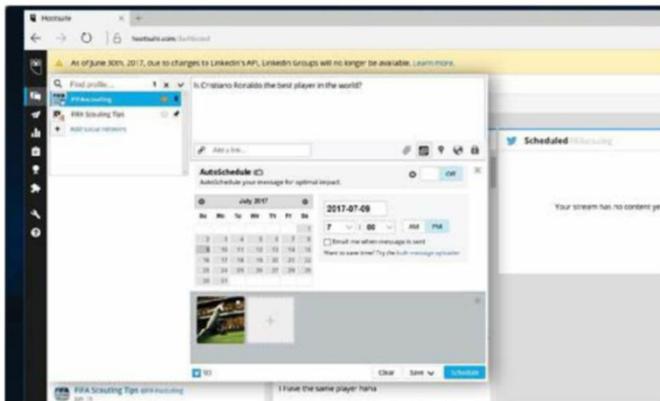
**4 Make use of lists**  
Lists are a great way to get more organised. Twitter lets you create groups of accounts that you can sort by topic. You might create a list of inspirational accounts that you can learn from, for instance, or a list of accounts that you've shortlisted for future collaboration. Browsing each list only shows tweets from the accounts within that group, which helps keep you focused.



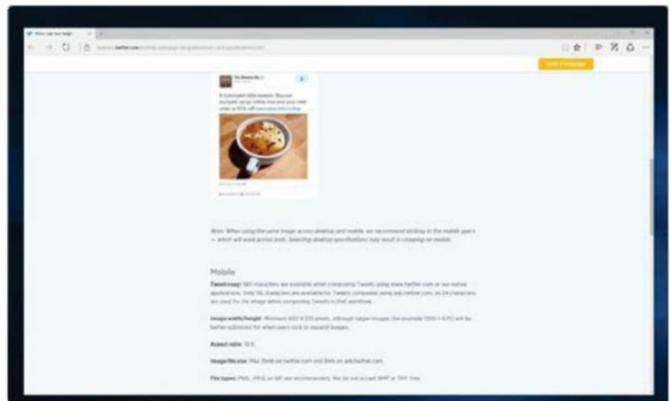
**5 Study the data** Whether it's on social or anything else in life, data can really help to inform your decisions. Twitter provides a dashboard of stats for you to browse – your most popular posts, the most prominent time you were mentioned by another account, how engaged your readers are, and more. Use this data to see what works best, work out the trends, then keep doing more of that.



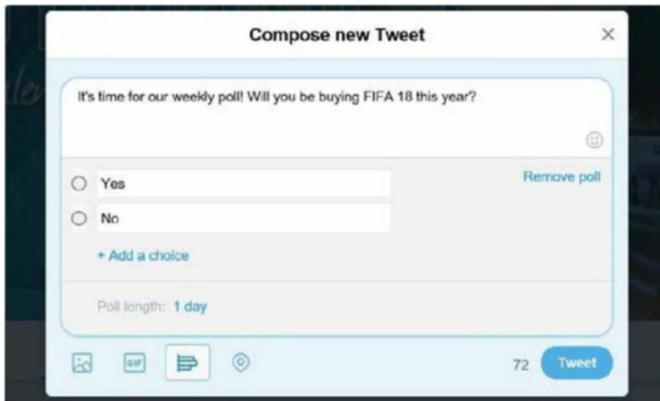
**6 Know your audience** Whenever you're writing for an audience, you need to know them inside out. One lesson you can learn from your Twitter data is when most of your audience is online. Use tools like Tweriod or Followerwonk to find that out, then make sure you post at those times to maximise the number of people who will see your posts. There's no point posting when your audience is asleep.



**7 Schedule your posts** It could be that most of your audience is based in another time zone, which makes posting at the optimal time somewhat unsociable for you. To get around that, take what you've learned from Steps 5 and 6, and then use tools such as Hootsuite or Buffer to schedule your posts. That way, Twitter will keep posting your content even when you're away from your PC or phone.



**8 Another dimension** There's no point posting an image on Twitter, only to find the most important bit has been cropped out. Make sure you learn what size and dimensions to use for your images so there's minimal cropping (Twitter sometimes changes these dimensions). The aim is to make life easy for your readers – if they can't see what an image shows right away, they're likely to just move on.



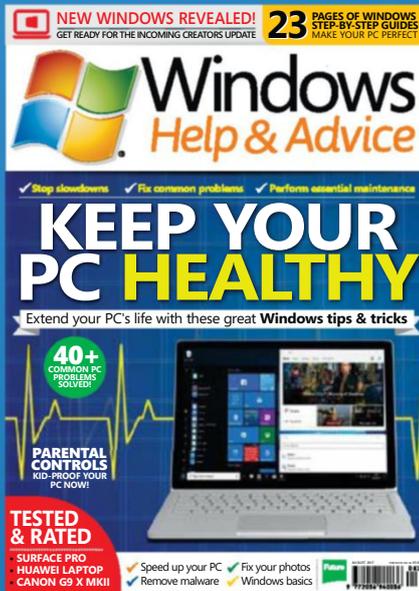
**9 Be consistent** One of the best things you can do for your audience is to be reliable. If you have some killer content that you post regularly – like a series of blog entries, for example – make sure you have a regular slot to post them on Twitter. That way, your audience will know when to keep coming back – a returning audience is more likely to gain an affinity for you, and help share your content.



**10 Promote with ads** There is one sure-fire way to increase your reach – promote your posts with adverts. Since this involves parting with cash, make sure you research what techniques work best, what your audience responds well to, and when to post. This can be useful if you use the ad to drive readers to your website. This is a good option if you need to promote your content to a wide audience.

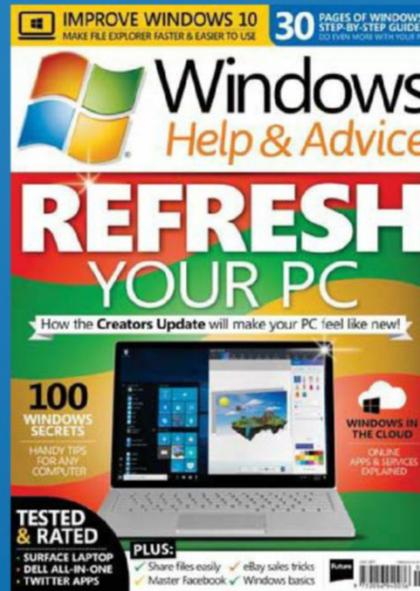
# MISSED AN ISSUE?

Our website stocks up to six months' worth of back issues – we deliver worldwide and all prices include shipping



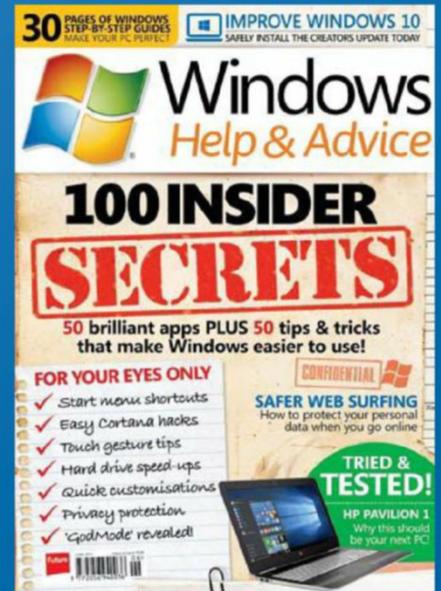
From £5.99

ISSUE 138 AUGUST 2017



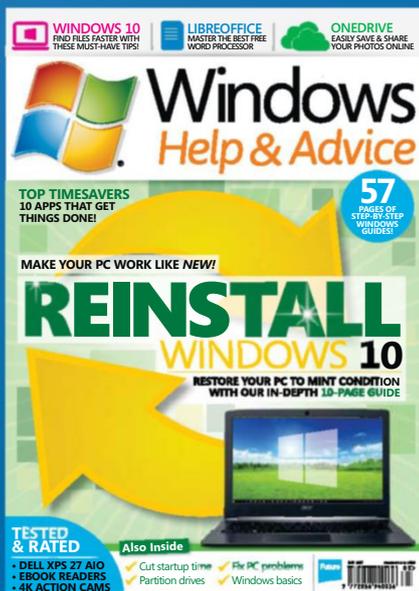
From £5.99

ISSUE 137 JULY 2017



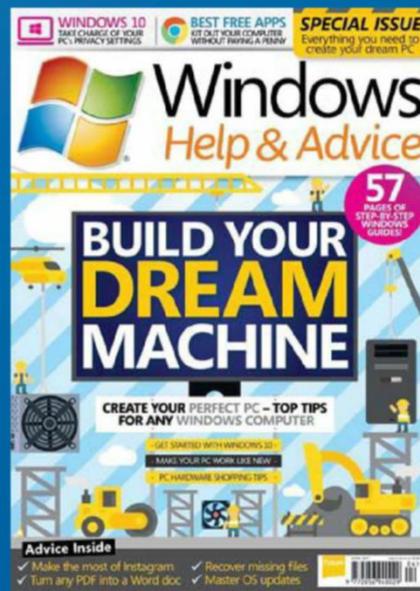
From £5.99

ISSUE 136 JUNE 2017



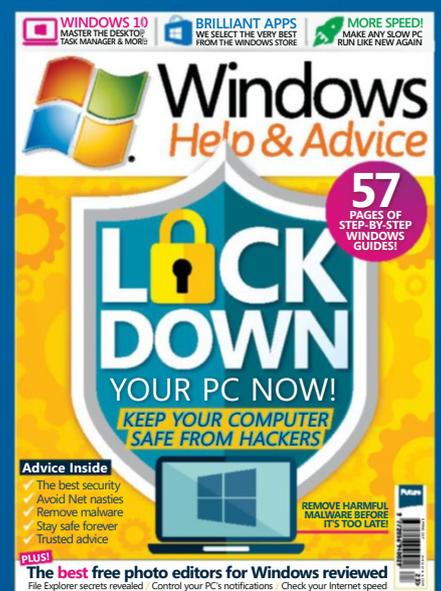
From £5.99

ISSUE 135 MAY 2017



From £5.99

ISSUE 134 APRIL 2017



From £5.99

ISSUE 133 SPRING 2017

FOR BACK ISSUES GO TO  
[www.myfavouritemagazines.co.uk](http://www.myfavouritemagazines.co.uk)

Learn how to...

# Add an external drive to your PC



Your guide *Ian Evenden* says...

"Expanding your PC's storage with an external hard drive is quick and easy, and can make a real difference to the way you work"

## At a glance

### Skill level...

- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

- Windows 10
- Windows 8.1
- Windows 7

**E**xternal storage is pretty cheap at the moment, so if your PC's internal hard drive – or SSD – is groaning at the seams with accumulated documents, photos and video files, why not offload it to an external drive?

While emptying your internal drive on its own won't speed up your computer, it can have many knock-on effects that make it appear like it has – things like file indexing taking less time, which frees up your processor for other tasks, or virus scanning being completed more quickly.

Once, there were many ways you could attach a new drive to your PC, but these days the USB socket is king – the blue USB 3.0 sockets being noticeably faster than their USB 2.0 predecessors. If you have a new, powerful laptop, you may have smaller USB-C ports, but these aren't found on PCs very often yet, and adapters are easily available.



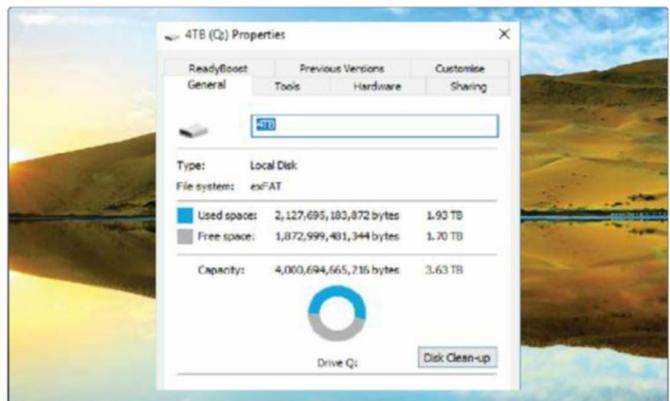
**+** **IAN'S BEST TIP!**  
*If you want to run apps from your external drive, consider an SSD. They cost more, but the speed increase is huge.*

## Step-by-step | Expand your computer's storage



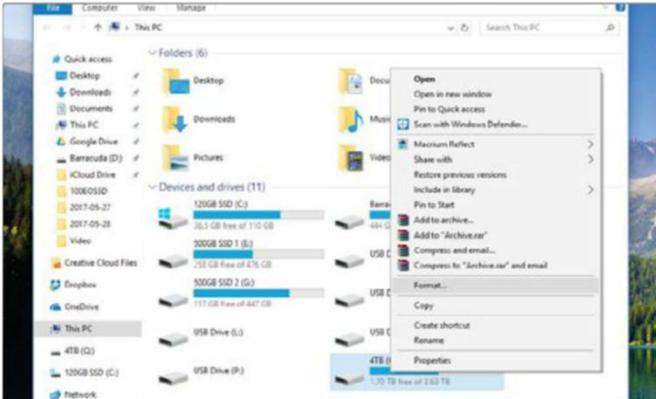
### 1 Plug it in

Some USB hard drives are powered by the USB plug itself, while others need a separate power adapter. If yours is one of the latter, plug in the power before connecting it to your PC. The drive should be recognised immediately, and pop up in File Explorer. Connecting a USB 3.0 drive to a USB 2.0 port will still work, but you'll be limited to USB 2.0 speeds.



### 2 Check the format

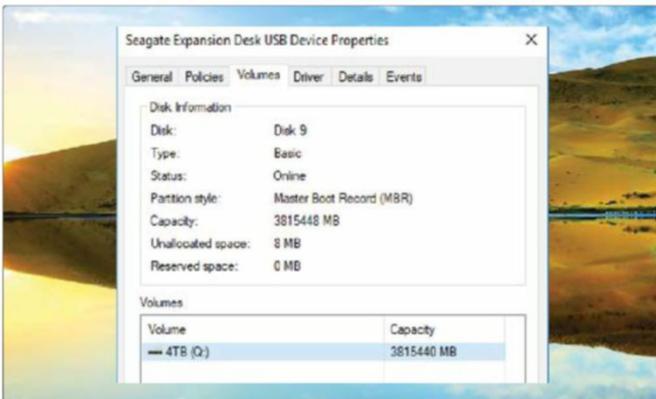
Drives are generally sold ready-formatted, so you can start using them immediately. You may want to reformat the drive, however, depending on what you want to do with it. If you're using a drive with a couple of terabytes of storage on it, the best format for using with Windows is NTFS. Many drives are formatted this way out of the box, but you can change it if you want to.



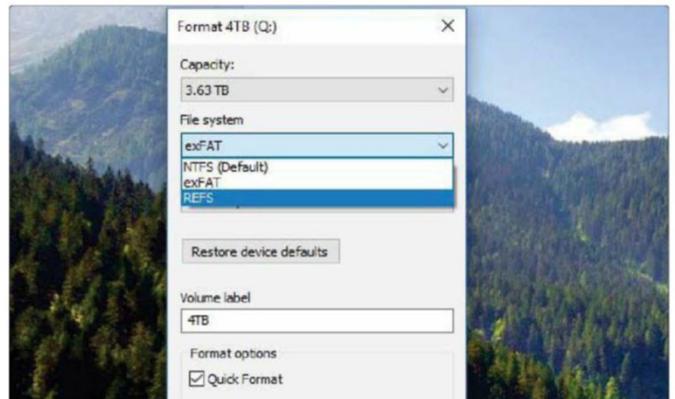
**3 Reformat** Most computers, including Apple ones, can at least read NTFS-formatted drives even if they can't necessarily write to them. If you want to use the drive to exchange data with a computer that uses a different operating system, consider reformatting to exFAT, as this can be read and written by a large range of systems, including games consoles.



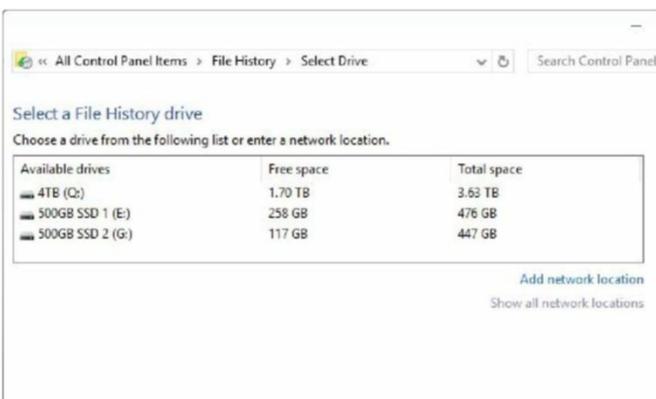
**4 Be careful** To format a drive in Windows, right-click its icon in File Explorer, and select Format from the menu. Formatting destroys all the information on a drive, so be sure to use it on either a blank new drive, or one you're certain contains no data of value or anything you need. Once you've selected Format, you can choose the file system it will use, such as NTFS or exFAT, then click Start.



**5 Where did my space go?** You may have bought a 4TB drive, but in Windows you'll only get around 3.6TB of usable space. This is because of a difference in the way hard drive manufacturers and your PC calculate capacity. Makers assume 1,000 megabytes in a gigabyte, while your PC uses a more accurate 1,024. The difference between these figures accounts for the 'missing' space.



**6 What's ReFS?** Windows 10 may ask to format your drive using the ReFS file system, introduced in Windows Server 2012 as a replacement for NTFS. For most home uses it makes no difference to the way your drive works – it's designed to handle eye-wateringly large files we just don't produce yet. As ReFS is new, it may not be supported by all machines or programs, so it's probably best to stick with NTFS.



**7 Backup** For security, you can use Windows' File History tool to start backing up your files to the new drive – just choose it as a target in the main File History window. If you want to clear space on your internal drive, the easiest way is to copy the folders that are taking up lots of space, such as Pictures or Videos, over to the new drive, deleting the originals when the copying process is finished.



**8 Can I encrypt it?** Not with Windows 10 Home Edition. If you're running Pro or Enterprise editions of Windows and your PC has a TPM chip, you can use BitLocker (<http://bit.ly/2tmkmtx>) to encrypt the drive. Third-party encryption programs are available from brands such as Symantec or Sophos, so you can protect your data behind a password in case you lose your drive, or it's stolen. ■

Learn how to...

# Master Aviary Photo Editor



Your guide *Ian Evenden* says...

"If you can find it, this is one of the best free photo editing apps on the Windows Store"

## At a glance

### Skill level...

Anyone can do it

► Straightforward

Tricky in parts

### Suitable for...

Windows 10

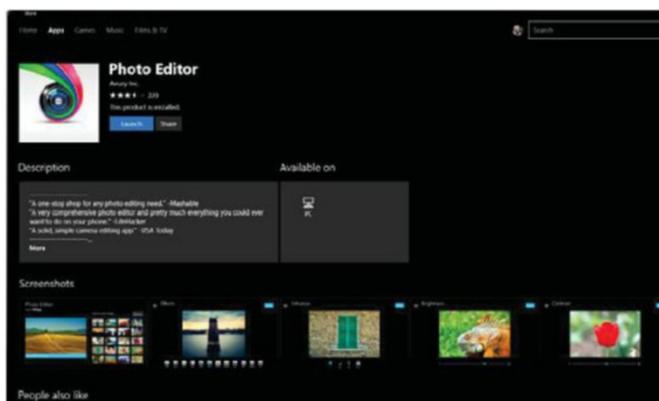
Windows 8.1

Windows 7

**A**viary has an interesting history. Founded in 2007, the company aimed to supply photo editing for free. It popped up on the Flickr photo sharing website, allowing you to edit your uploaded photos and save them back to your photostream. The company attracted a great deal of investment, and then in 2014 it was bought by industry giant Adobe, which has been busy integrating its tools into the Creative Cloud suite of applications. As it's now part of Adobe's software development kit, anyone can add its abilities to their programs.

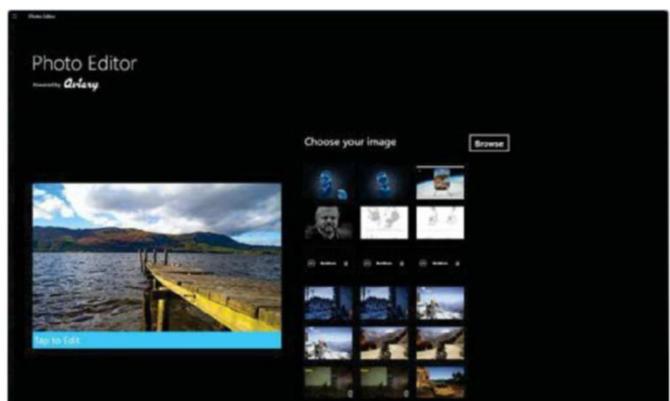
There is a 'pure' form of Aviary, however, available both on the Windows Store and as a mobile app. Confusingly, it's just called Photo Editor – the 'powered by Aviary' line only appears once the app is running – but it can be identified on the Store by the name of its developer: Aviary Inc. Let's take a look...

## Step-by-step | Make your photos pop



### 1 Find the app

Due to its generic name, this isn't the easiest app to find. Search for Photo Editor and it should be fairly high up in the results and can be recognised by its blue, pink and green icon. The developer is Aviary Inc, but searching the Store for 'Aviary' doesn't get you anything. Once you manage to track it down on the Windows Store, click the blue button to install it.



### 2 Open an image

When you first launch the app, you'll see the image files it's found on your hard drive, along with some photos of its own. Click the Browse button to open a File Explorer window and search your image library for the file you want to work on. Open it, and the interface changes to display the editing tools. You can return to this screen at any time using the back arrow.

#### BACK BUTTON

Click this at any time to cancel what you are currently doing and head back out to the previous Photo Editor screen.

#### YOUR IMAGE

Taking up the bulk of the window, your image can't be zoomed into, so be sure to display it as large as possible.

#### AUTO TOOLS

Tools to the left of the toolbar are the more automatic ones. Look here for one-shot fixes and photo filters.



**FULLSCREEN**  
This button by Minimise and Maximise puts the app into fullscreen mode, where the top bar is hidden.

**DONE**  
Press this to finish editing. A PNG file of your adjusted image will be placed in the Pictures/Aviary Photos folder.

## Jargon buster!

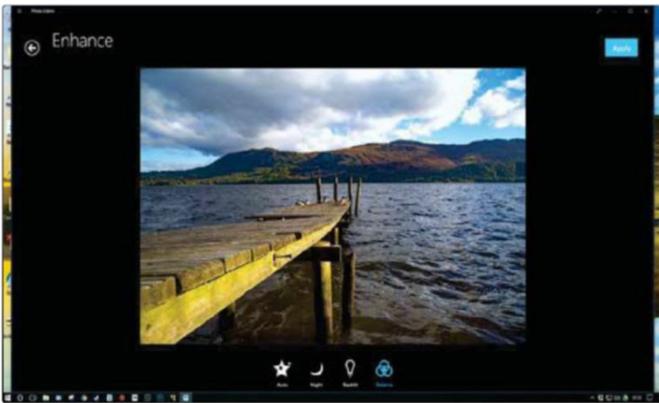
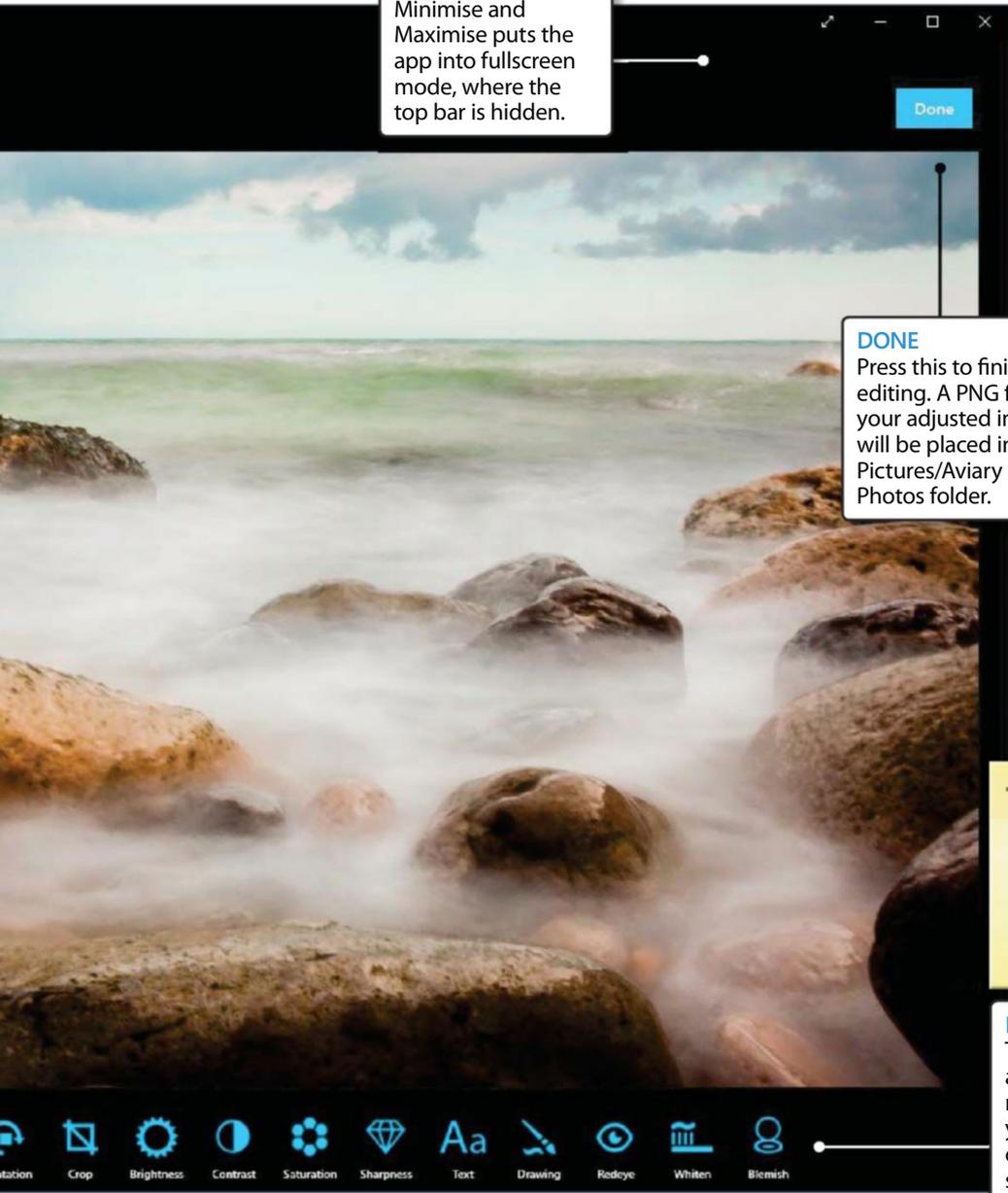
► **PNG**  
Portable Network Graphics. A type of image file that uses lossless compression to strike a balance between small file sizes and high quality images.

► **Compression**  
Methods to make a file smaller. Lossy compression throws away data, and while it can compress effectively, it can affect image quality.

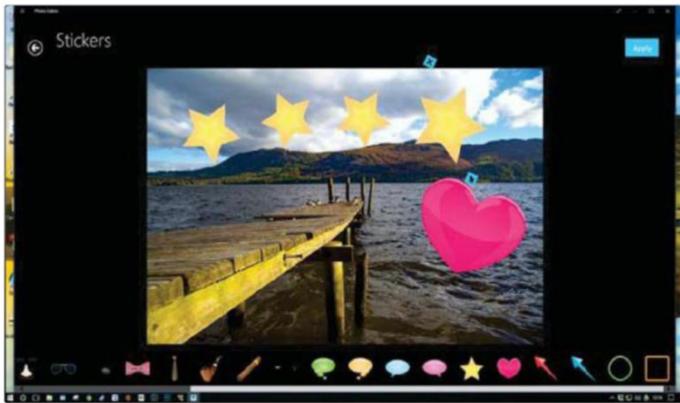
► **JPEG**  
The most common image file format. JPEG uses lossy compression, and at higher compression ratios image quality can suffer.

**IAN'S BEST TIP!**  
*Aviary saves to your Pictures folder. However, you can try moving Pictures to a cloud-based service like OneDrive.*

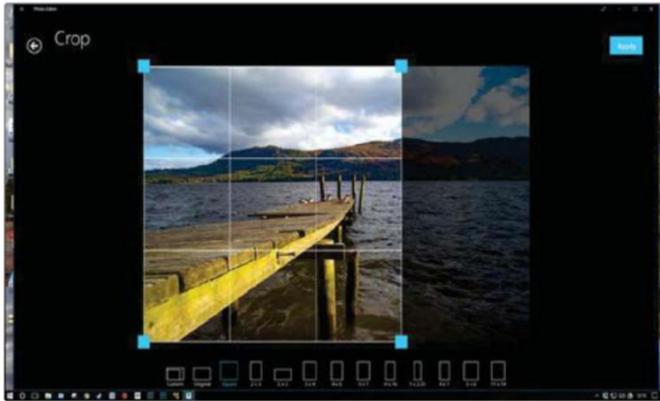
**MANUAL TOOLS**  
The tools at the right are those that need more input from you, such as choosing a brush size or a colour.



**3 Enhance**  
The first tool along the bottom is Enhance. It has four options that are clicked on or off. The first, Auto, is an attempt at a one-tool-for-all approach to editing, and boosts the colour and contrast in your image. Night is for images taken in the dark, but has interesting effects on any photo, Backlit attempts to lighten foreground objects, and Balance has a go at colour correction.



**4 Effects and Stickers**  
These are one-click filters, plus amusing stickers to place over images. There's a limited range, and many of the stickers are designed to be placed over pictures of people. The Effects can be interesting, with a nice black-and-white in Metropolis or the colour saturation boost of Dean. All edits you make have to be applied using the button at the top right before you move on.



**5 Orientation and Crop**  
These affect the angle and shape of your photo. Orientation allows you to rotate your image through 90-degrees in either direction, or flip it horizontally or vertically to get a mirror image. Cropping allows you to remove the edges of the image to focus in on the main subject, or to make it fit a particular size – there are presets along the bottom, or you can drag with the mouse.



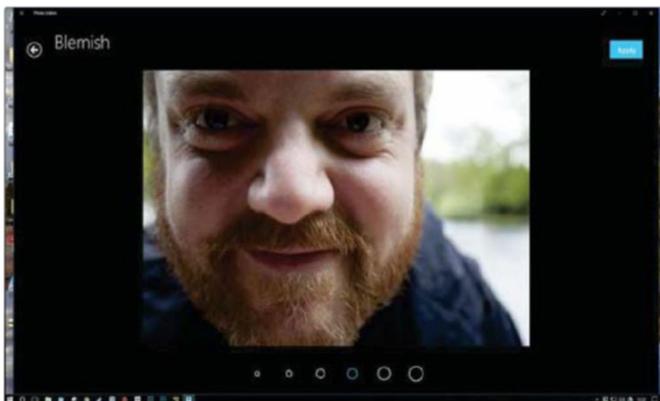
**6 Brightness, Contrast, Saturation, Sharpness**  
These affect the look of your photo. There's no colour balance tool, so your only option if you're working with a file that's very yellow is the Balance option under Enhance. These tools work simply, with a single slider each and an Apply button. It's possible to ruin your image with these tools, so make sure you don't apply the effect too strongly.



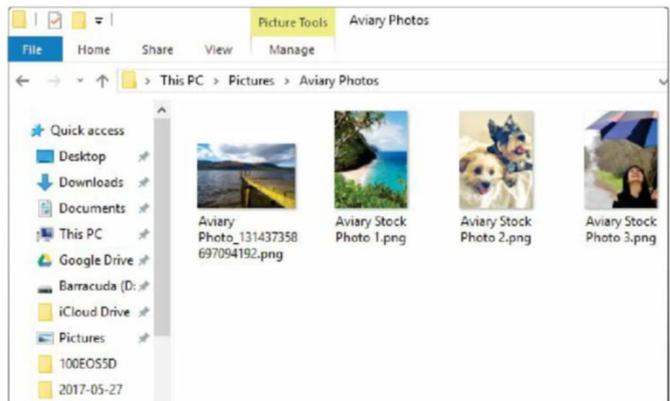
**7 Text and Drawing**  
These allow you to add text and your own drawings to your image. It can be used to add headings or messages, and your text can be scaled and coloured, but always runs in a straight line. Drawing gives you a choice of brush sizes and colours – it's better suited to a pen input on a touchscreen device, since drawing with a mouse can be a hit-and-miss affair as the pointer wobbles.



**8 Redeye and Whiten**  
These tools are aimed at touching up portraits. The Redeye effect is less common these days, but occurs when a camera flash is too close to the lens axis. It lights up blood vessels in the back of the eye, giving an eerie, werewolf-like appearance to the victim's eyes. It can be removed with a simple click here. Whiten is aimed at the teeth, taking away any yellow colour cast.



**9 Blemish**  
The Blemish brush is also aimed at cosmetic improvements. It's a spot removal brush similar to the Spot Healing brush in Photoshop, and will smooth over skin imperfections you click on, such as acne or scars. It tends to blur a lot, especially if used over a large area, and its use isn't helped by the app's lack of a zoom feature, meaning you always have to work on the entire image.



**10 Saving**  
There's no explicit Save button in Avary, images are saved to your PC when you hit the Done button. No matter where you opened the image file from, your edited image goes into an Avary Photos folder within your Pictures folder. It's always a PNG too, even if the original file was a JPEG – the app won't save over your original image file and you'll always have it to edit again.

# GET TO GRIPS WITH NETWORKING WITH THE HELP OF OUR ULTIMATE HANDBOOK

Discover everything that you need to know about all of your devices and create the best home set-up!



**Future**

Ordering is easy. Go online at:

[www.myfavouritemagazines.co.uk](http://www.myfavouritemagazines.co.uk)

Or get it from selected supermarkets & newsagents

Learn how to...

# Rename your photos quickly



Your guide *Nick Peers* says...

"Use PhotoRenamer to give your photos more descriptive filenames with the minimum of effort"

## At a glance

### Skill level...

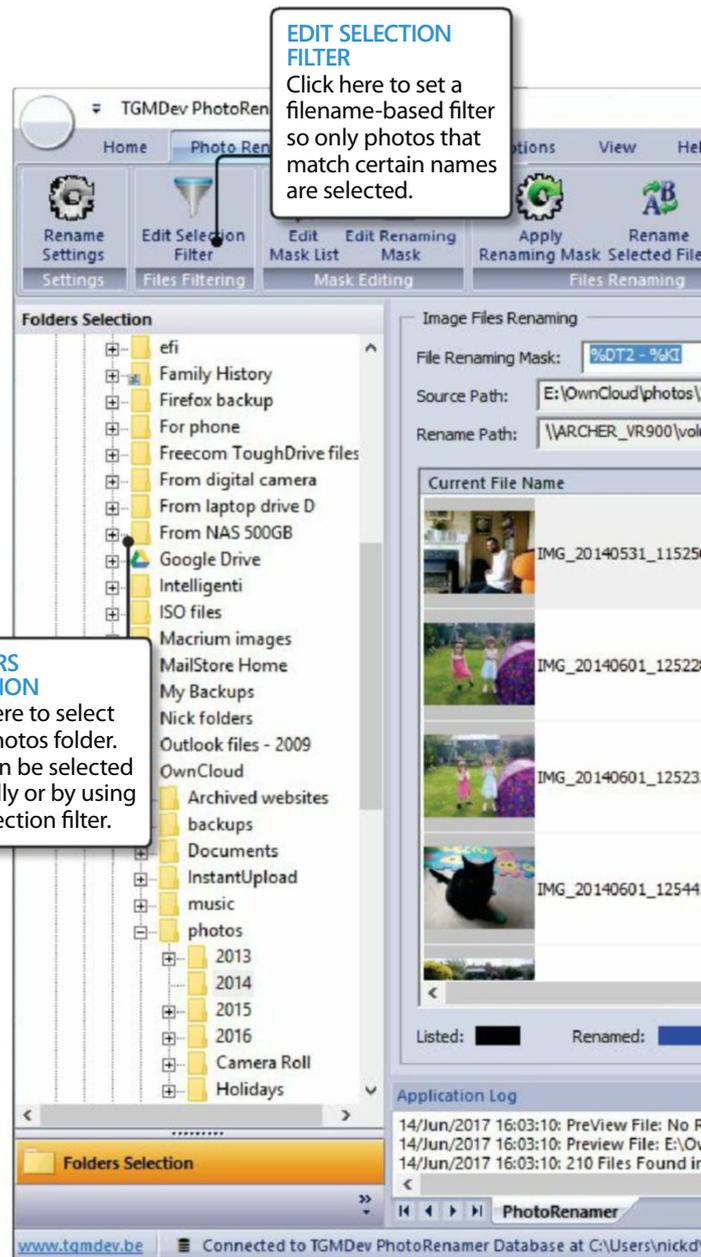
- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

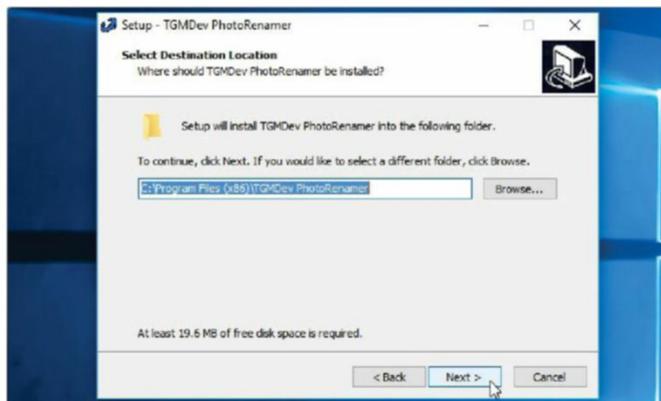
- Windows 10
- Windows 8.1
- Windows 7

**H**ow many times have you told yourself you're going to finally go through the hundreds of digital photos you've taken and rename them in such a way they're easy to go through? Thanks to PhotoRenamer, you no longer have to put up with incomprehensible filenames, and instead name your photos in such a way as to help you more easily recognise and organise them.

PhotoRenamer works by applying special user-defined masks to your filenames, making it easy to rename them with keywords, counters, and even the date and time they were taken (if that information is recorded in the file's **EXIF metadata**). And if you're worried about making a mistake, PhotoRenamer provides a full preview of what your files will be called, plus offers options whereby your original files (and their names) can be preserved, just in case.

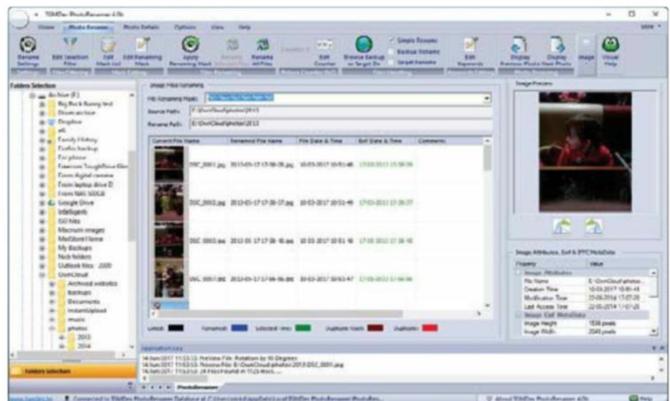


## Step-by-step | Batch rename your photos



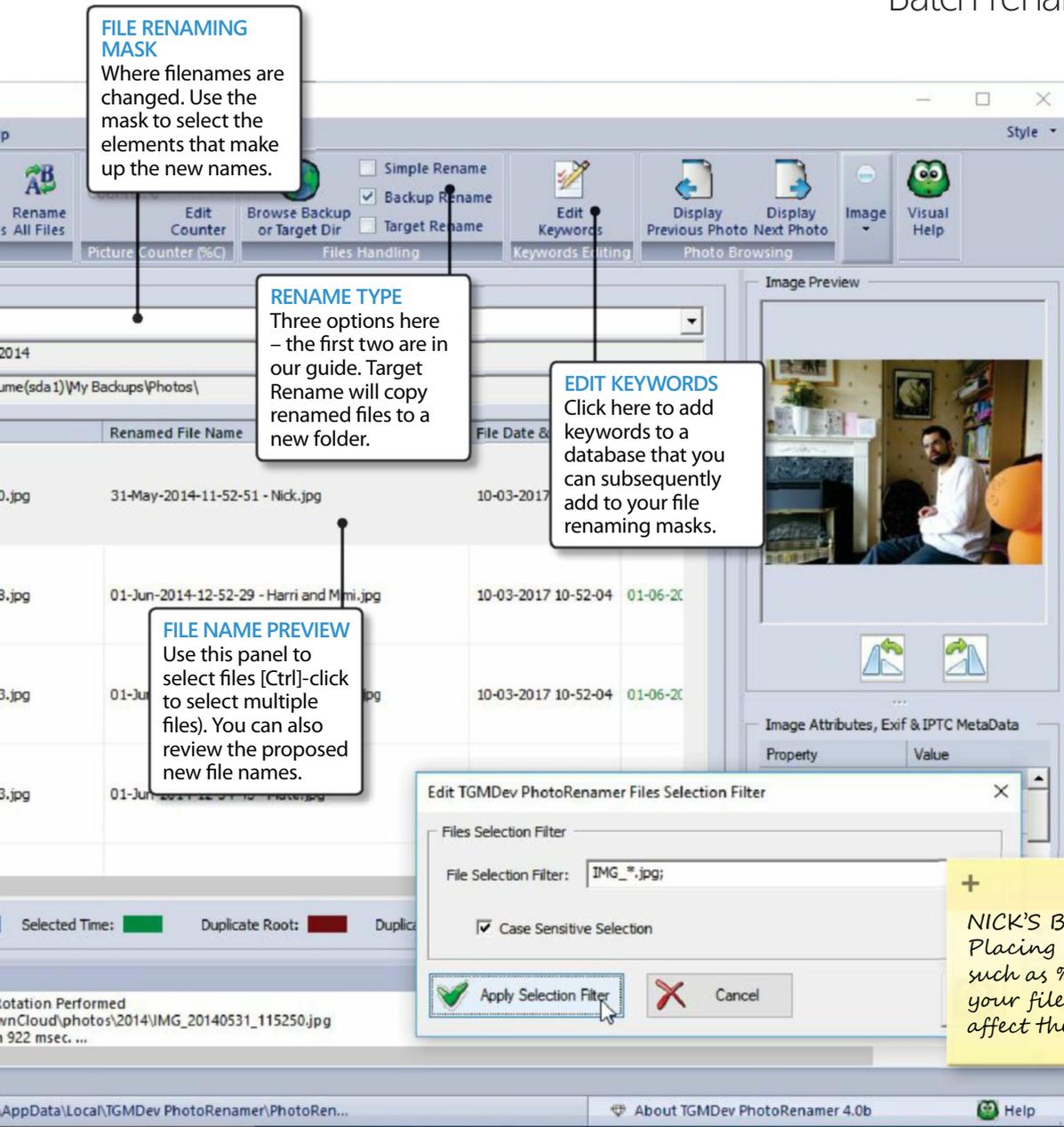
### 1 Get PhotoRenamer

Visit [www.tgmdev.be](http://www.tgmdev.be) and click the 'PhotoRenamer 4.0b' link under 'Windows Utilities' followed by 'Download PhotoRenamer 4.0b' from the Quick menu on the left. Leave the fields blank and click 'Start Download...' Save the setup file to your PC, then double-click it and follow the prompts to install PhotoRenamer. Once complete, leave the box ticked and click Finish.



### 2 Select source folder

After launching, a pop-up menu provides access to several videos explaining how the program works. Click OK to close this window and access the main screen proper. First, use the Folder Selections pane on the left to browse to and select the folder containing the first set of photos you wish to rename. When you select a folder with photos, wait while it generates thumbnails.



### FILE RENAMING MASK

Where filenames are changed. Use the mask to select the elements that make up the new names.

### RENAME TYPE

Three options here – the first two are in our guide. Target Rename will copy renamed files to a new folder.

### EDIT KEYWORDS

Click here to add keywords to a database that you can subsequently add to your file renaming masks.

### FILE NAME PREVIEW

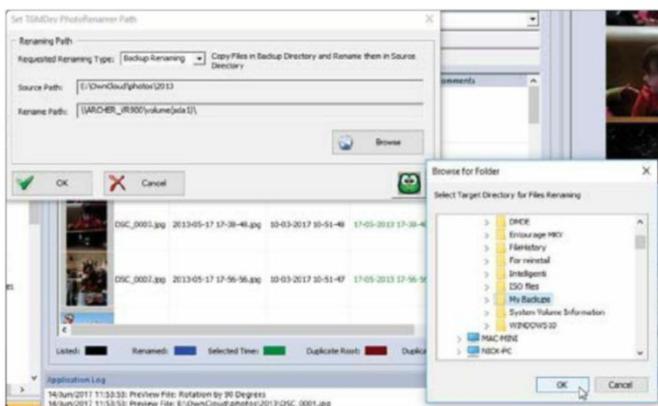
Use this panel to select files [Ctrl]-click to select multiple files). You can also review the proposed new file names.

### NICK'S BEST TIP!

Placing any keyword masks such as %K1 at the end of your filename, so they don't affect the sort order.

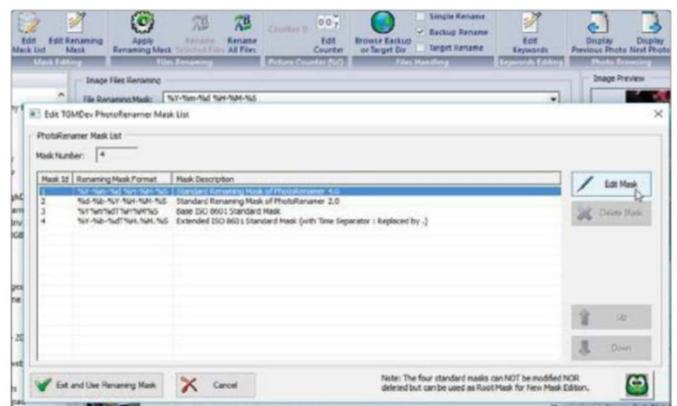
## Jargon buster!

- ▶ **EXIF metadata**  
A standard form of metadata – or tags – that are applied to photos, such as when and where a photo was taken.
- ▶ **Mask**  
Special filters – preceded by the % character – that tell PhotoRenamer to rename a file using certain information, a date or time stamp for example.
- ▶ **Batch processing**  
A job that performs a series of repetitive tasks – such as renaming files – on a group of objects – often files – without you having to intervene.



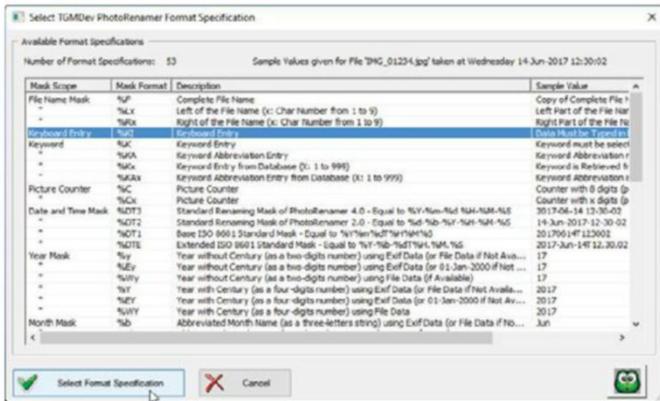
### 3 Change rename path

You'll see a list of photos appear in the main pane. Pay attention to the Renamed File Name column – this tells you what the new filenames will be. If you want to err on the side of caution, tick the Backup Rename box under Files Handling on the ribbon. By default, the originals will be stored in a Backup folder inside the current folder. Click Browse to change this.

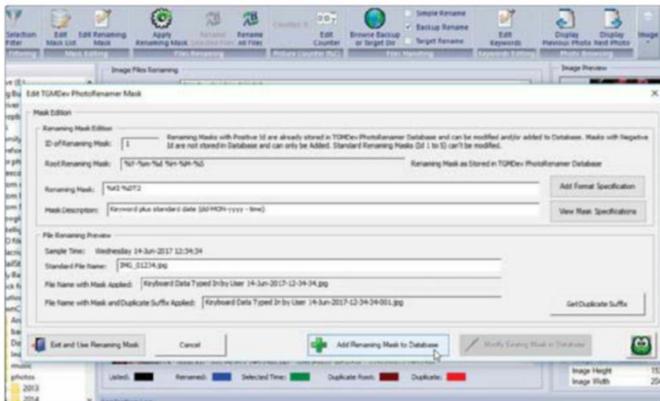


### 4 Choose naming convention

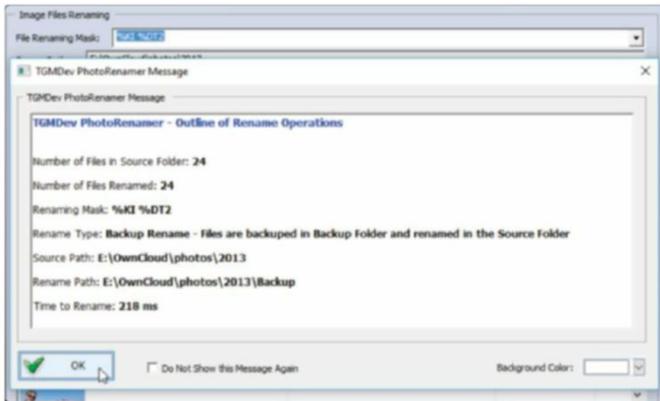
PhotoRenamer can rename your files in several ways using masks. The default mask renames the photo according to the date and time stamp recorded in its EXIF metadata. The default mask names things in such a way that the files will be sorted oldest first. To create your own mask, click the Edit Mask List button. Select the first entry in the list and click Edit Mask.



**5 Set up new mask**  
Masks are created from existing ones. Start by clearing the Renaming Mask box and clicking Add Format Specification. You'll see an extensive list of options, from keywords and counters to a wider range of date masks (both fully formed – such as %DT2 – and individual elements, such as %b for an abbreviated month name). Click 'Select Format Specification' to add it to the mask.



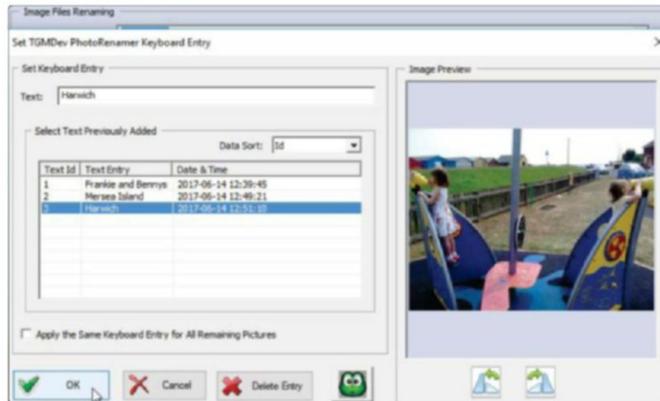
**7 Apply new mask**  
Use the File Renaming Preview panel to see how your mask will affect the names of your files. You can manually remove and add characters too – for example, you could substitute %KI with actual text, such as 'France'. When you're happy, give your mask a name using the Mask Description field, click 'Add Renaming Mask to Database' followed by 'Exit and use Renaming Mask'.



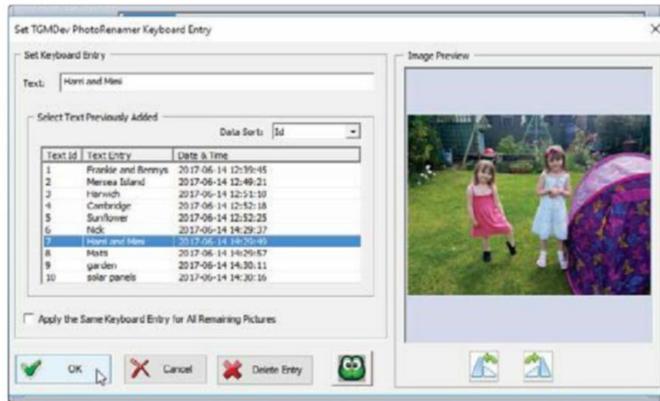
**9 Review and rename**  
Check the 'Renamed File Name' field for each photo you've selected – if any are incorrect, right-click their entry in the list and choose Edit Applied Mask Data. Click the incorrect mask to open the editing tool – for example, the keyword editor – and make your change. Once you're happy, click Rename All Files or – if you're selected a group of files – Rename Selected Files.



**6 Build mask**  
Click 'Add Format Specification' to add a second mask, and any subsequent masks, to your file. If you select %KI (keyword entry), you'll be prompted to add a keyword to the name of your selected files – 'holiday', for example, – when you come to rename them. Remember to add separators (typically dashes, underscores or spaces) between each mask to make filenames easier to read.



**8 Select your keywords**  
Click 'Exit and Use Renaming Mask'. If you chose the %KI option, you'll be asked to enter your choice of keyword or phrase for the first photo. Rotate the image preview if necessary, then click OK to move on to the next. Previously entered keywords can be chosen from the list, or tick 'Apply the Same Keyboard Entry...' if the remaining photos will share the same keyword.



**10 Your photos, renamed**  
If you chose the backup option, you'll find that your original files have been copied to the backup location, while newly named files have replaced them. If you're happy with the renaming, delete the originals, then move on to the next folder (if your mask contains %KI, you'll be prompted to add keywords). Once that's done, your photos will be easier to recognise and organise.

# HAVE YOUR SAY AT THE 35TH ANNIVERSARY OF **THE GOLDEN JOYSTICK AWARDS**

THE ONLY  
GAMING AWARDS  
VOTED FOR BY  
GAMERS

**2017  
GOLDEN  
JOYSTICK  
AWARDS**

VOTING OPENS  
**SEPTEMBER 2017**

Visit [www.gamesradar.com](http://www.gamesradar.com) to cast your vote



[facebook.com/goldenjoysticks](https://www.facebook.com/goldenjoysticks)



[@GoldenJoysticks](https://twitter.com/GoldenJoysticks)

Learn how to...

# Control your PC's power usage



Your guide *Ian Evenden* says...

"If you don't need your PC to run at full power all the time, you can control how much energy that it uses"

## At a glance

### Skill level...

- Anyone can do it
- Straightforward
- ▶ Tricky in parts

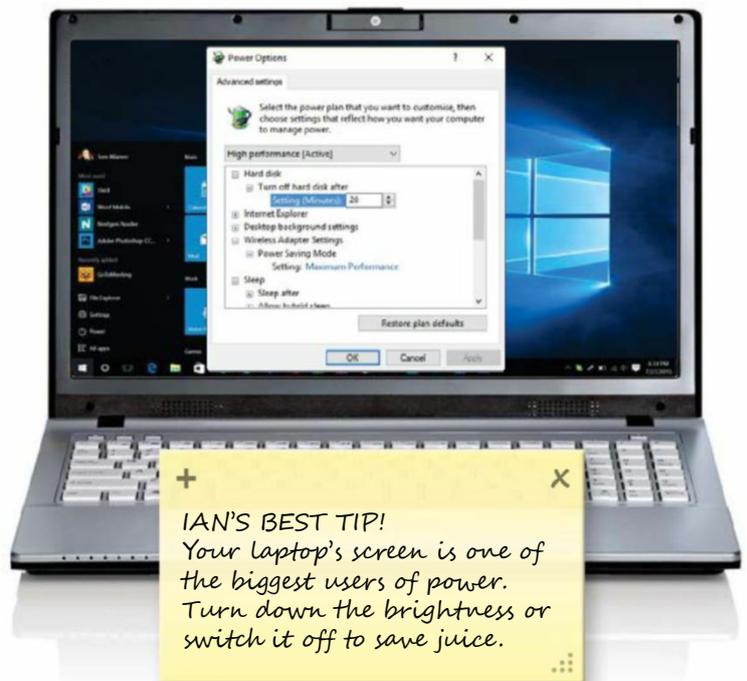
### Suitable for...

- Windows 10
- Windows 8.1
- Windows 7

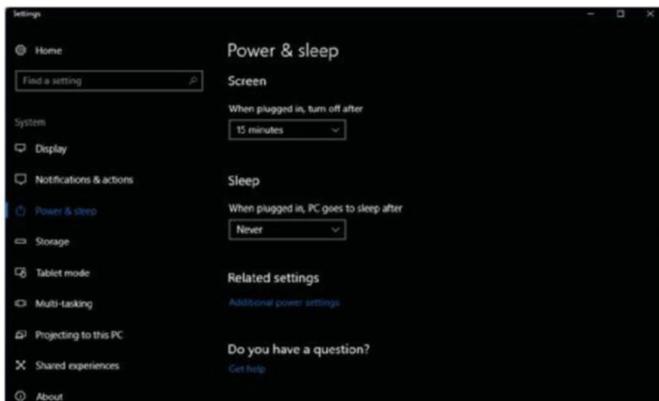
**M**odern PCs can use a lot of electricity. The power supply in a desktop can potentially draw over a kilowatt, especially if the PC was built with gaming or 4K video editing in mind. You don't need that if you're surfing the web or preparing a few word processing documents, however, and that's where Windows' power management options come in.

Laptops use less power than desktops, but when on the move you need to conserve your battery life, and power saving can help. Not only can you specify when your PC will go to sleep, or hibernate, but you can also dig deep into the settings to restrict your processor's maximum frequency or when your hard drives stop spinning to save power.

If that sounds a bit technical, Windows already has some power plans built in, so you can easily switch between high performance and power saving with just a few clicks.

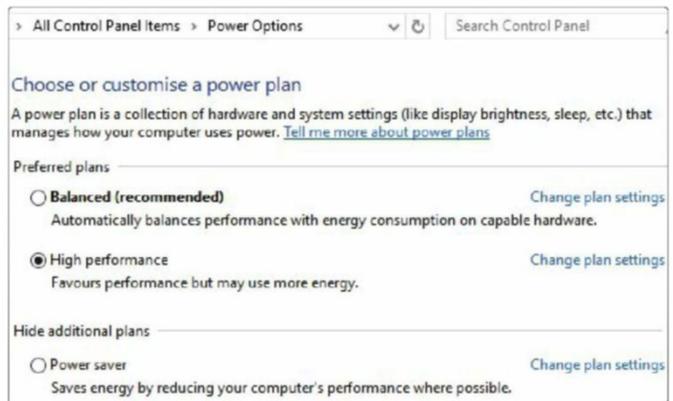


## Step-by-step | Take the power back



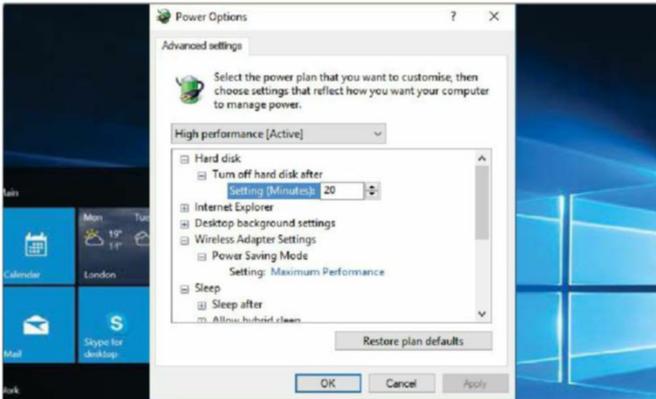
### 1 Use Power & Sleep Settings

In Windows 10, pop up the Start menu and type 'power', and look for Power & Sleep Settings in System Settings. Click on this, and a window will appear allowing you to alter the settings. Choose how long you'd like to leave your PC idle before it goes to sleep or turns its screen off. If you have a laptop, you can have different settings for battery power or when plugged in.



### 2 Additional power settings

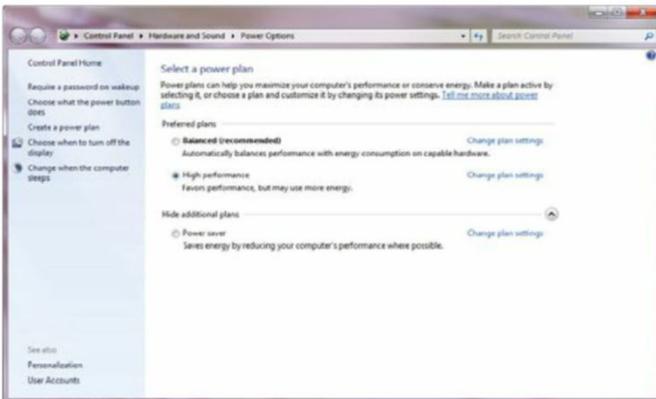
Click the 'Additional power settings' link to be taken to the Power Options window. Here, you can choose between Windows' preset power plans: Balanced, 'High performance' and 'Power saver'. If you're playing games or editing video, you'll want 'High performance'. If you're trying to eke out every last bit of battery life, choose 'Power saver'. Most people should choose Balanced.



**3 Advanced power settings**  
Click 'Change plan settings' on any plan to be taken to a new screen, then click 'Change advanced power settings'. An options window will appear. The most interesting items here are probably 'Power buttons' and 'lid' which changes what the PC does when its power button is pressed or its lid is closed. 'Multimedia settings' lets you set the level of processing power used for video playback.



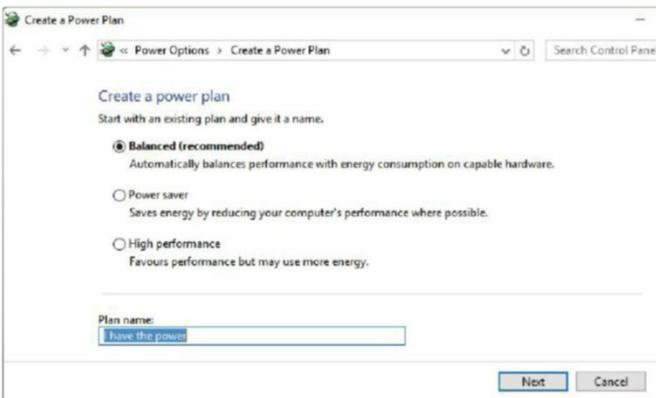
**4 Processor power management**  
You can also tinker with the settings for your processor's power management. Intel and AMD make a lot of their CPUs' ability to manage their own speeds and power consumption, so only do this if you know what you're doing. If you do, you can set the maximum processor frequency and change other settings from the 'Advanced settings' window. Proceed with caution.



**5 In Windows 7**  
If you're still using Windows 7, you'll find it has a similar approach to power management, but the settings for it are in a different place. You'll find the options in Control Panel > Hardware and Sound > Power Options, or you can search for 'power settings'. You'll see the same three power plans as Windows 10, and you can click through to the 'Advanced settings' window too.



**6 Custom plan**  
If any of the three built-in plans aren't to your taste, you can either change them or create a new one. To change existing plans, use the 'Change plan settings' link to the right of the plans in the Power Options window. Your choices are limited to screen timeout and how long it takes for the computer to enter sleep mode, unless you want to tinker with the Advanced settings.



**7 Create your plan**  
At the left of the Power options window in Windows 10 you'll see a link marked 'Create a power plan'. Click it, and you'll be asked to select one of the three existing plans to use as a template, and to give your new plan a name. Click Next, and the display off/PC sleep time drop-downs appear, so you can choose how long your PC will stay on. Hit 'Create' to save your new plan.



**8 Restore defaults**  
You can tinker with any of the power plans, and make some deep changes using the Advanced settings, but there's always a way back, whether you've been fiddling with a built-in plan or a custom one. At the bottom of the Edit Plan Settings window there's a link marked 'Restore default settings for this plan'. Clicking it does exactly what you'd expect. ■

# Learn how to... Do even more with Cortana



Your guide *Dan Grabham* says...

"It's even easier to get help from Cortana, thanks to the latest Windows 10 Creators Update"

## At a glance

### Skill level...

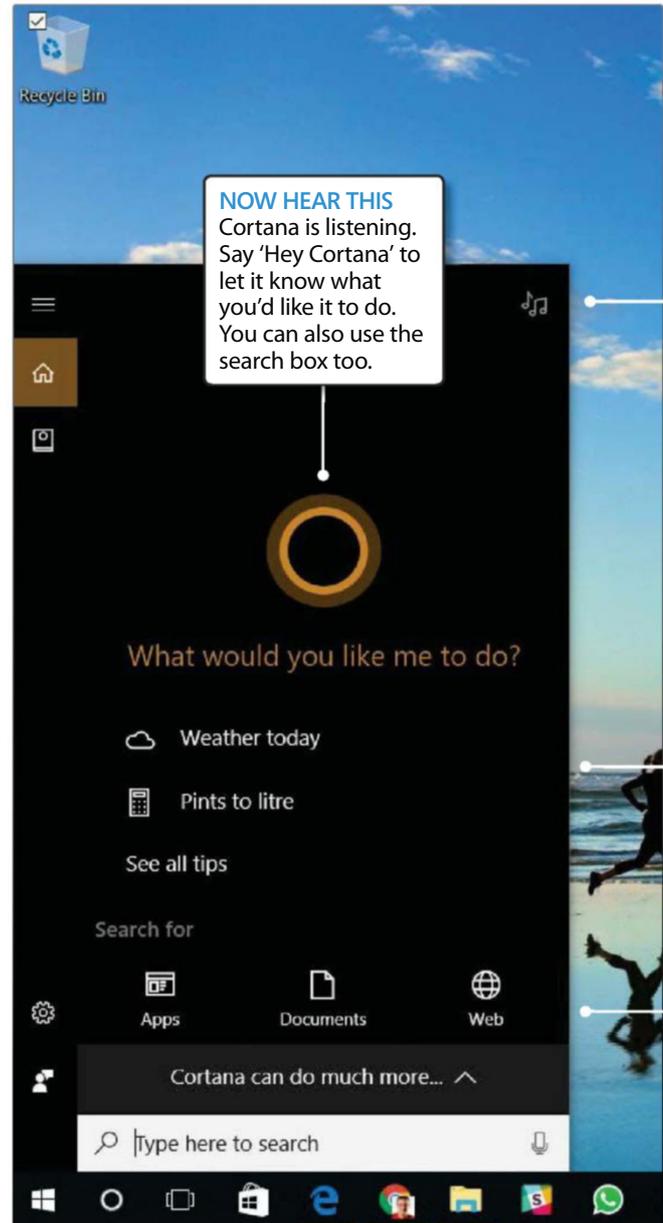
- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

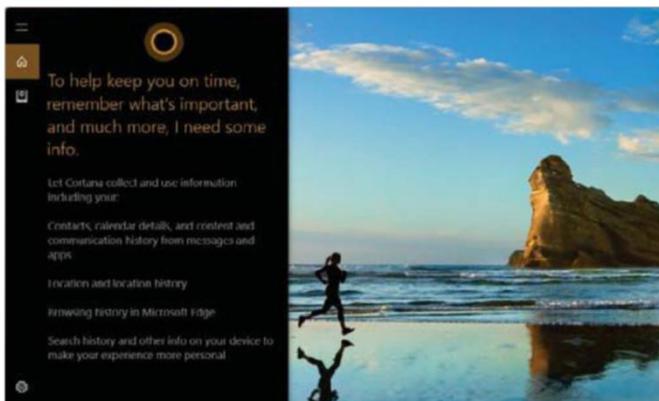
- Windows 10
- Windows 8.1
- Windows 7

**W**indows 10 is constantly evolving. The Creators Update has now rolled out to most PCs and we've got another Fall/Autumn update arriving later in the year. As part of this, Cortana is also changing as new features are added and others improved. One thing is for sure – Cortana is here to stay. It even has a promoted role as you set up new devices; Cortana now helps you with the setup.

You will need to be running the latest version of Windows 10 to use many of these features and some others are rolling out as 2017 goes on (not all languages are being rolled out together, as we'll explain). To make sure you have the Creators Update installed, go to Settings > System > About. Your Windows 10 version number needs to be 1703 or later. Not got it? Then go to <http://bit.ly/2vaWuuR> to download it. So let's take a look at what's new...



## Step-by-step | Check out Cortana's new features



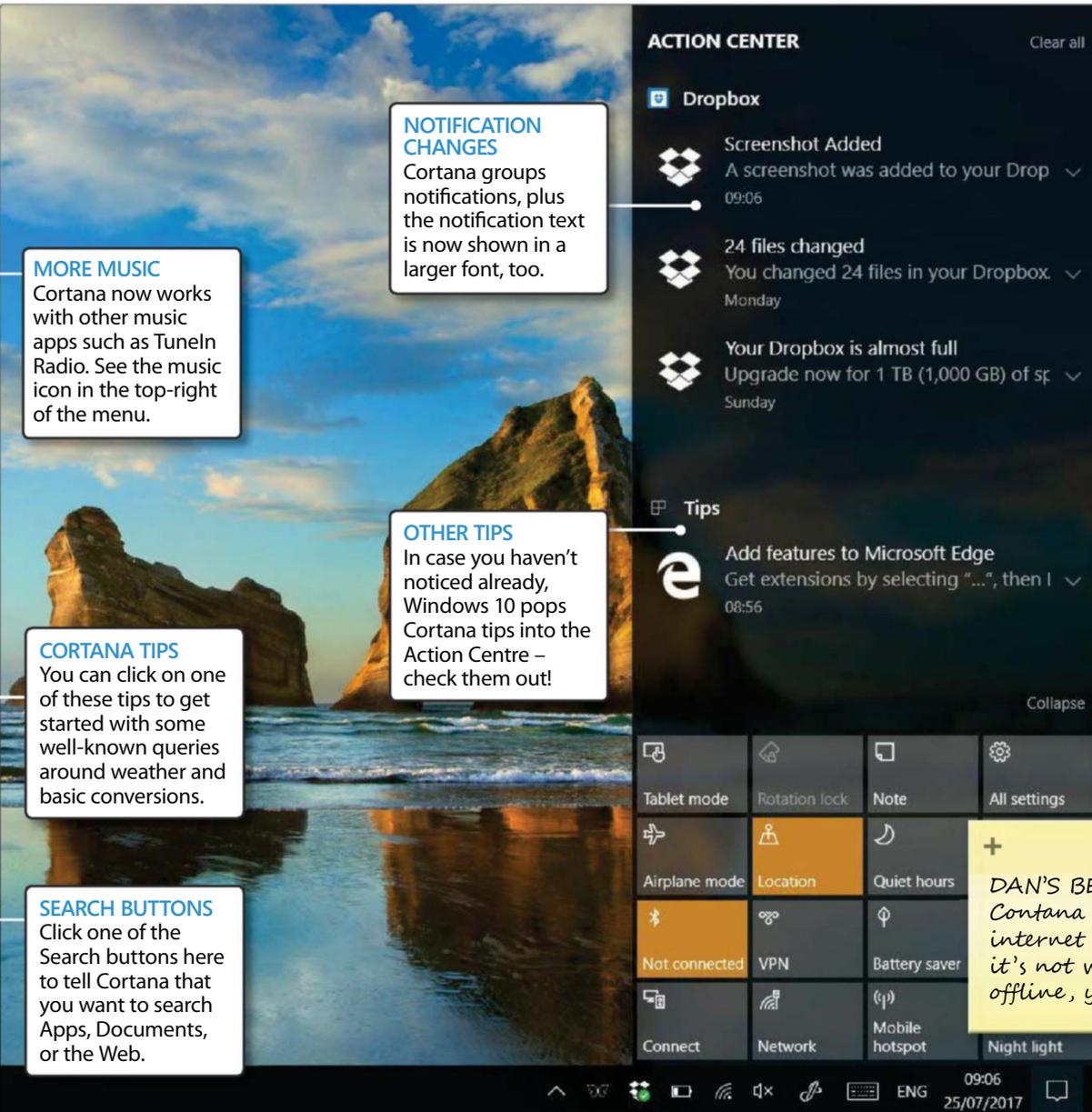
### 1 Give Cortana access

Cortana relies on access to your personal information. Without this, it's just another way to search for your files and the web, and can't offer you personalised results. You need to give it permission to access your location, browsing history (Microsoft Edge only) and search history. You can tweak the information that Cortana collects in Settings (the gear icon in the left menu bar).



### 2 Lock screen access

Cortana can now be accessed from the **lock screen** so you can say 'Hey Cortana' and let the assistant invoke automatically without even touching your PC. You can turn this on in Cortana's Settings, and opt to let Cortana have access to your calendar and email while it's at it. Remember: because your PC is locked, this could give someone unauthorised access to basic personal info.



## Jargon buster!

► **Virtual assistant**  
Cortana is one of a new band of digital helpers that use your personal information to give you relevant, contextual answers to queries. Siri, Alexa and Google Assistant are other examples.

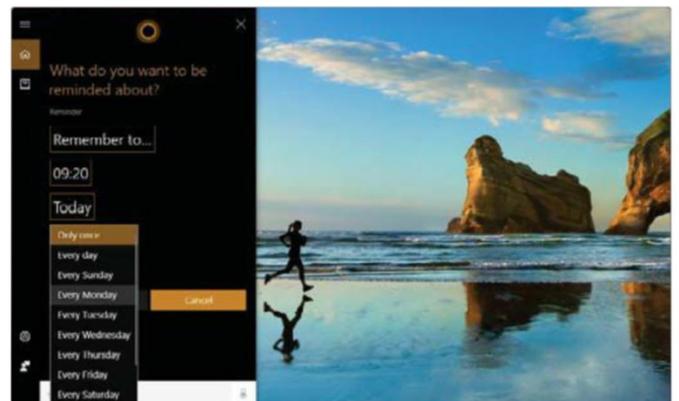
► **Natural language**  
A language which has evolved naturally without planning. It's what enables you to talk to Cortana.

► **Lock screen**  
The 'splash' screen that appears before you enter your password. You can now use Cortana from it directly.

**DAN'S BEST TIP!**  
Cortana needs an active internet connection, so if it's not working and you're offline, you'll know why.



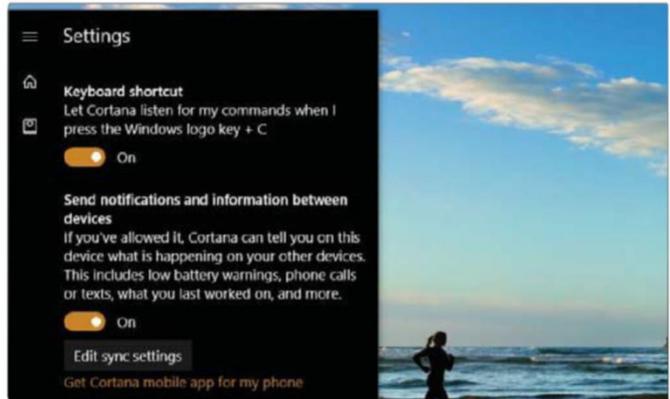
**3 Improved searches**  
One area that Cortana wasn't that good at, initially, was searching, especially for Cortana's own settings. This has improved in the latest update. Web searches in Cortana have also got better, and Cortana now has SafeSearch settings so that there's no chance of anybody accessing web content that they shouldn't – there's a Strict setting in addition to a Moderate option.



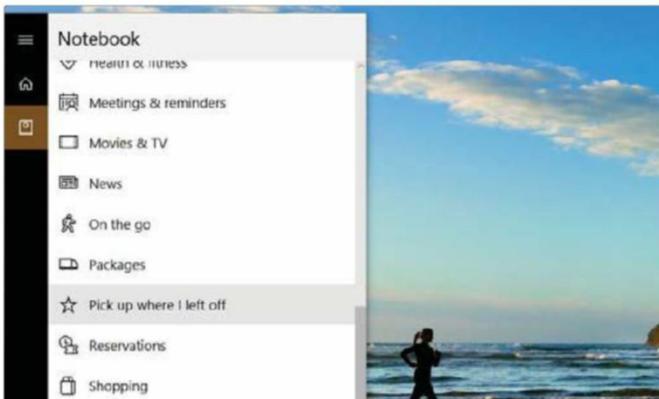
**4 Reminder improvements**  
Also improved in Cortana is the assistant's ability to set reminders. You can now choose to repeat reminders, for example, on a particular day every week, or maybe every day. We think there should be some checkbox options here, too, so you can easily select required days (like Tuesday or Thursday). However, the initial setup of reminders works really well.



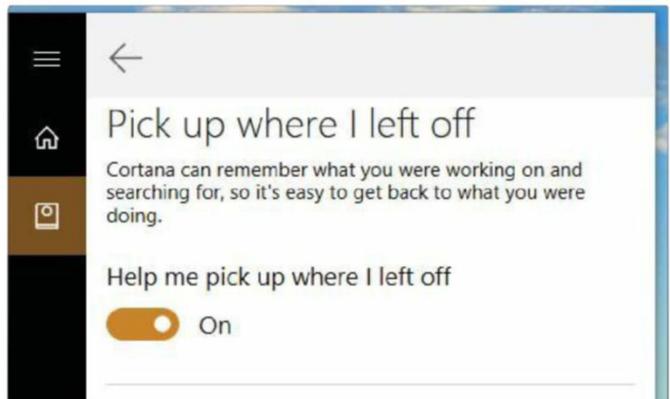
**5 Reply to texts on your phone**  
 One of Cortana's most exciting 2017 features is the ability to reply to text messages from your PC. Third-party apps, such as Pushbullet, have enabled this for a while, but it's great to have the ability to do it natively on iOS and Android. All you need to do is to enter your phone number, download the Cortana app (or access it via your preferred app store) and follow the instructions.



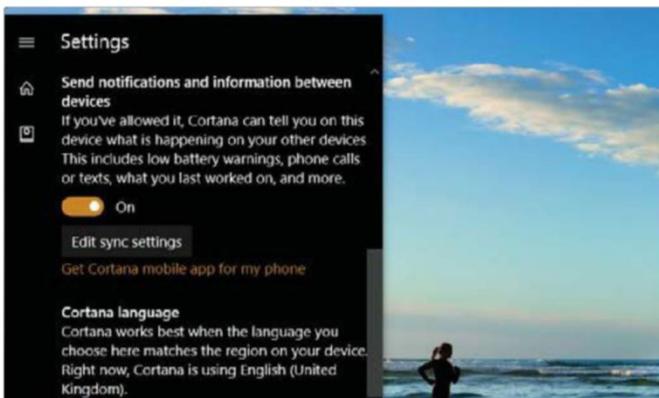
**6 Shortcut to Cortana**  
 You can also now invoke Cortana via a keyboard shortcut, [Win] + [C]. A setting toggles this on and off in case you don't want to activate it accidentally. Many users won't find this so useful, but if you're a sucker for keyboard shortcuts we reckon you'll love this one as you can get Cortana working for you without having to touch the mouse.



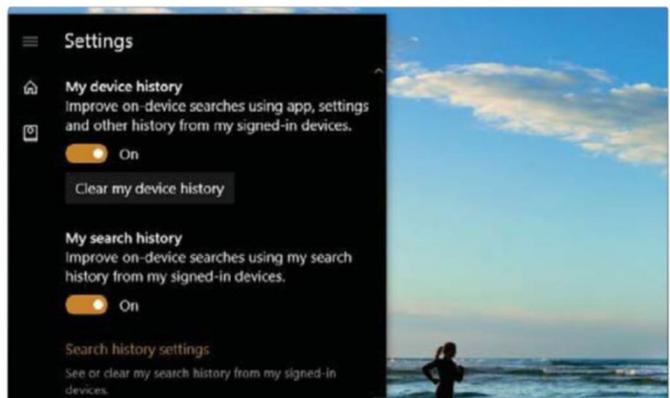
**7 Pick up where I left off**  
 Another exciting feature, 'Pick up where I left off' enables you to do just that, but on another Windows device. To get it working, go to the Cortana Notebook (the second icon down in the left sidebar) and scroll down until you see the option shown here. Don't see it? Change Cortana's language to US English in Settings (this won't change your main Windows language).



**8 Turn it on**  
 You'll then need to enable this setting. At the time of writing, 'Pick up where I left off' was only available for Windows 10 PCs where the Cortana language – or main display language in Windows Settings > Time & Language – is set to US English. However, by the time you read this, it may well be available in UK English, so check it out and see how you get on!



**9 Enable notifications**  
 You need to enable something else in Cortana's Settings to make this work: the ability to send notifications and information between devices. That's because 'Pick up where I left off' sends a notification to other Windows 10 PCs you're signed into. This shows things like tabs in Edge that you're looking at on another PC. Clicking the notification lets you to pick up... you get the idea.



**10 Devices and searches**  
 You can also improve Cortana's search results using the 'My device history' and 'My search history' settings. These improve searches because they co-ordinate apps you've set up and things you've searched for on all your devices. Cortana works best when you give it full access to your stuff, but these settings stop items on specific devices from being used by Cortana if you wish. ■

GET OUR  
DIGITAL EDITION!



**TWO  
FREE  
ISSUES**  
WHEN YOU  
SUBSCRIBE  
TODAY\*

MONTHLY SUBSCRIPTION:  
£1.99 – **SAVE 38%**  
SINGLE ISSUE: £2.49

↓ **AVAILABLE ON YOUR DEVICE NOW**

(READ ON YOUR PC AT ZINIO.COM OR PLAY.GOOGLE.COM)



\*Free issues not available on Zinio.

# Learn how to... Stop websites tracking you



Your guide *Nate Drake* says...

Discover how to use the Ghostery browser extension and protect your privacy when surfing online

## At a glance

### Skill level...

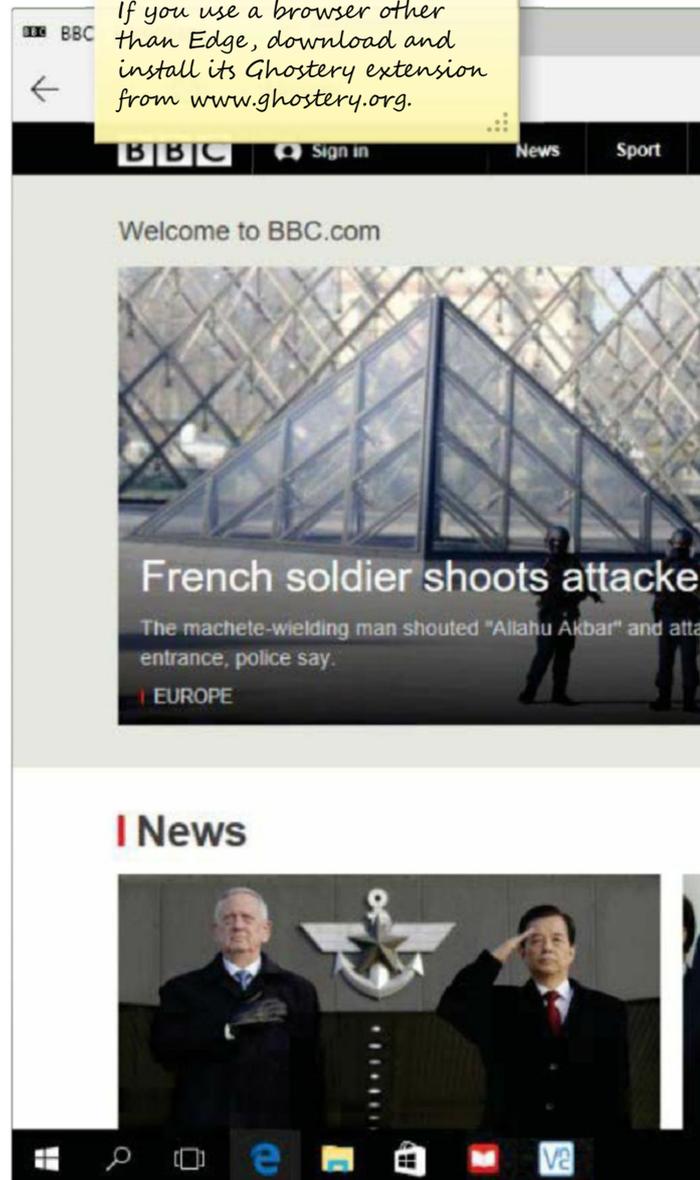
- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

- Windows 10
- Windows 8.1
- Windows 7

**M**any websites you visit are tracking you through placing small files named 'cookies' on your computer. This helps them gather information about your browsing habits and target you with adverts. Data collection tools (known as 'trackers') can be very intrusive. If you wanted a quote for life assurance for instance, would you want an insurance website to know that you'd been browsing books on Amazon about quitting smoking?

Luckily, a Microsoft Edge **browser extension** called Ghostery can help stop you from being tracked online, blocking communications with such companies while still enabling you to surf the web. Better yet, it displays a handy purple list of companies that have tried to track you, as well as what information they're after. Install it today to make sure your web history stays private and keep monitoring it regularly.

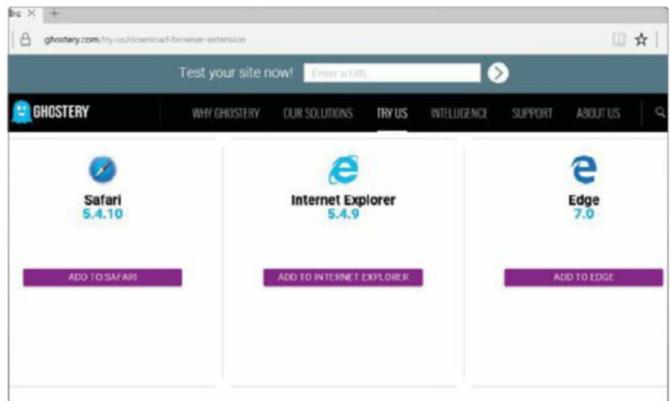


## Step-by-step | Install Ghostery



### 1 Update Windows 10

Ghostery needs the most recent version of Windows to work. Save and close any open files and back up your data if possible. Next, click the search button at the bottom left of your desktop then enter Windows 10 Upgrade Assistant. Click on the desktop app to open. Click Yes to confirm that you wish to open the app, then Update Now to begin upgrading your system.



### 2 Visit the Ghostery website

Once the update is complete, open Microsoft Edge and visit [www.ghostery.org](http://www.ghostery.org). Hover your mouse over Our Solutions and click on Ghostery Browser Extension. A new screen will appear listing various web browsers. Scroll down until you see Microsoft Edge. Click 'Add to Edge' and the Windows Store will open. Quit Microsoft Edge, then click the button marked Free to install.

**BLOCK ALL**  
This stops cookies from tracking you and is enabled by default. Do this and Ghostery will update its tracker database.

**PURPLE BOX**  
Open Ghostery's box at any time by clicking on the '...' button in Microsoft Edge and then on Ghostery App.

**Jargon buster!**

- **Browser extension**  
A piece of software, such as Ghostery, that is designed to extend the function of your browser. Only install from trusted sources such as the Windows Store.
- **Cookies**  
A small piece of data used by third parties to identify you. Cookies are usually downloaded and stored by your browser. Ghostery prevents this.
- **Blocking cookies**  
Some web browsers include an option to block cookies altogether. Some sites may not load if you do this, which is why it's better for you to use Ghostery.

**RESTRICT SITE**  
Blocks all trackers and is enabled by default. Only use this if you've previously trusted the site or paused blocking.

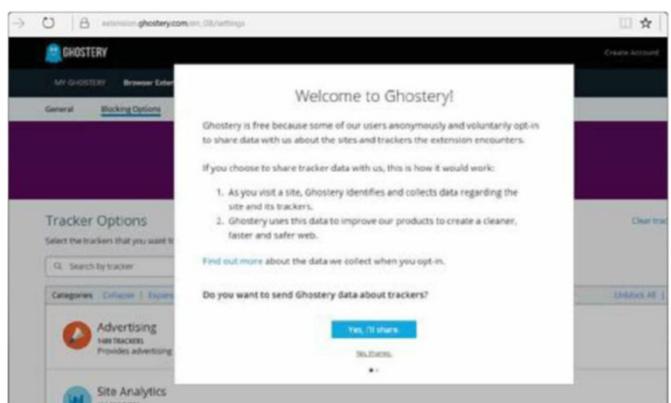
**PAUSE GHOSTERY**  
Click to temporarily disable blocking of tracking cookies across all websites. Use only if pages are loading incorrectly.

**MAP THESE TRACKERS**  
Requires a Ghostery account. Click to see exactly who is trying to track you and where they are.

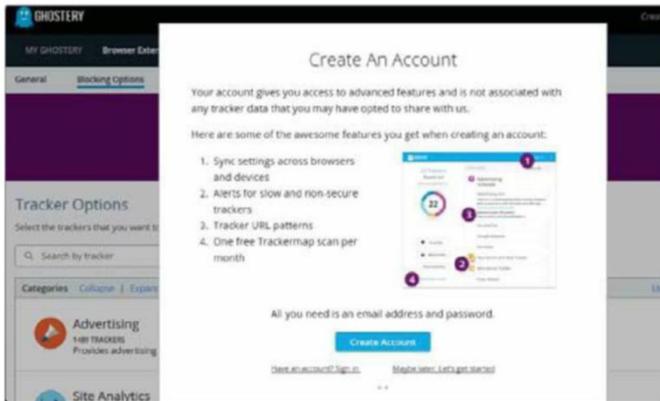
**TRUST SITE**  
Click this button to allow all trackers on a particular website. You should only do this if a site isn't loading correctly.



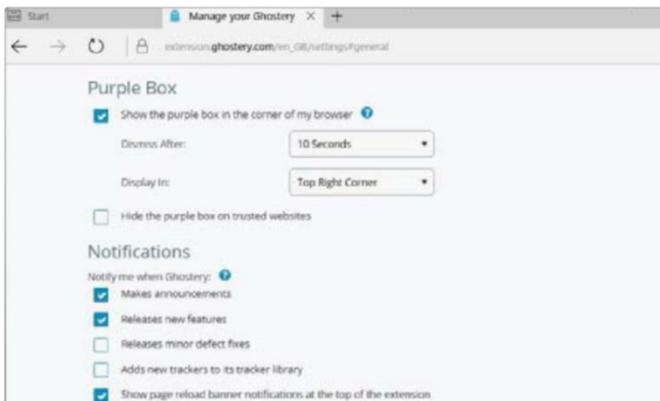
**3 Begin Ghostery download**  
At this stage Ghostery may ask you to confirm your date of birth and region. Enter this and click Next. The Windows Store will say 'Acquiring Licence', then 'Downloading'. The Ghostery extension is small (0.1MB) so this won't take long. Finally the Store will tell you that the product has been installed. The button below the Ghostery logo will now read 'Launch'. Click this to open Edge.



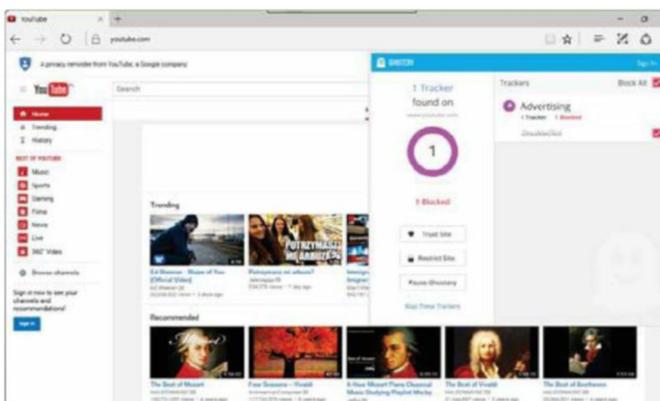
**4 Welcome to Ghostery**  
A notification will appear at the top right explaining that Ghostery has been installed. You still need to activate it, so click 'Turn it on'. You'll now see a 'Welcome to Ghostery' splash screen. At this stage Ghostery will ask you if you wish to share data about trackers you encounter while browsing. This is entirely optional but helpful to detect new threats. Choose Yes or No as you see fit.



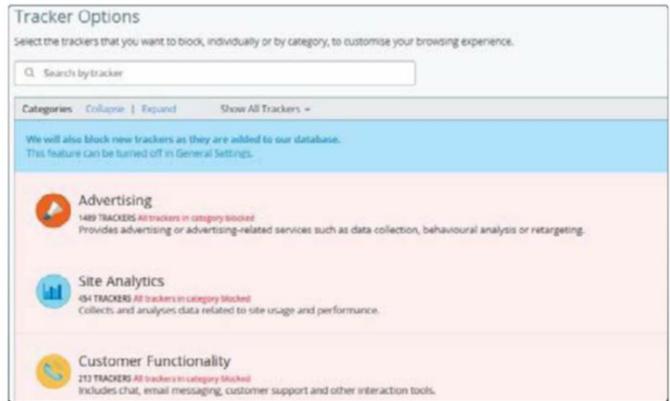
**5 Create an account**  
 Ghostery now displays the Create an Account window. You don't have to do this but it allows access to extra features, such as syncing settings across your devices. You're also allowed one free trackemap scan per month to help you locate companies that are tracking you across the internet. If you don't want to create an account right now then click 'Maybe later, let's get started'.



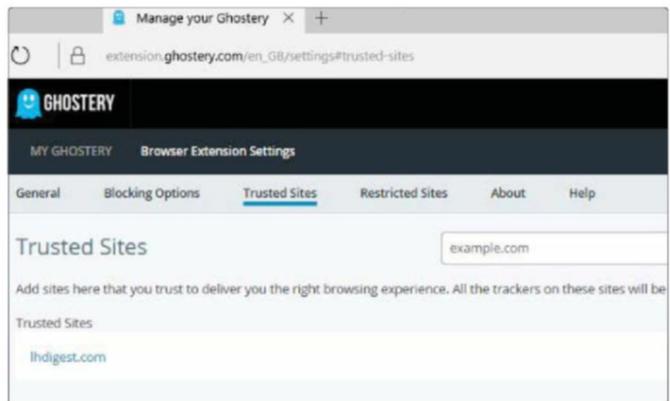
**7 Choose what to block**  
 Click on the word 'General' next to Blocking Options. Most options can be left ticked. However you may wish to scroll down to the Purple Box section. By default Ghostery displays a small box for a short time when you visit a new site listing all the trackers that have been blocked. You can switch this off or change the duration (default is 15 seconds) and position of the box here.



**9 Test pilot Ghostery**  
 Once Ghostery has been set up. Click the address bar at the top and visit a social media or news site to check that everything is in order. If the purple box doesn't appear click the ellipsis (...) button at the top right of the Edge window then Ghostery App to view any blocked trackers. You can enable individual trackers here or choose to trust the entire site, allowing all cookies.



**6 Choose your tracker options**  
 Ghostery will next launch the main Tracker Options window. Scroll down to see various types of trackers which Ghostery can detect such as Advertising and Social Media. The easiest option for now is just to click on Block All to ban all trackers. If this causes issues later, you can return to this screen by clicking on the More option in the Ghostery Box and then Advanced Blocking.



**8 Configure Trusted Sites**  
 Although you can visit sites individually and click Ghostery's Trust Site button, it's easier to set this up here. Click the Trusted Sites option at the top of the page. Once it loads enter the name of the website in the white bar at the top, then click on the green '+' button. Repeat for any websites you fully trust. Hover over a website and click the 'X' to remove it from this list at any time.



**10 Install an ad blocker**  
 Although Ghostery can prevent websites from tracking you, it can't stop all pop-up ads or those annoying ads that load when you're trying to watch YouTube. Fortunately Adblock Plus is also available for Microsoft Edge. Open the Windows Store and search for its name, then install. This reduces the chance you'll accidentally click on a link and download malware. ■

# MACBOOK VS. SURFACE LAPTOP

# T3

The Gadget Magazine

## SMART HOME ESSENTIALS

- Tech upgrades for every home
- From lights to smart kettles
- How to control it all!

Your best buys from  
**£39**

### 4K TV

WHAT TO WATCH  
BT OR SKY? NETFLIX  
OR AMAZON?



+ The best  
**DOLBY  
ATMOS**  
soundbar



**6**  
wireless  
audiophile  
headphones  
**TESTED**

+ **T3 GOES TO SPACE!**  
And we took the latest  
action cameras with us

**YOU NEED  
THIS iMAC**  
→ 4K SCREEN,  
SUPER-FAST



**WIN!**

SUPER-FAST  
NEXT-GEN  
WI-FI WORTH  
**£1,000**



## ON SALE NOW!

AVAILABLE AT WHSMITH, MYFAVOURITEMAGAZINES.CO.UK  
OR SIMPLY SEARCH FOR T3 IN YOUR DEVICE'S APP STORE

SUBSCRIBE TODAY AND SAVE! SEE [WWW.MYFAVOURITEMAGAZINES.CO.UK/T3](http://WWW.MYFAVOURITEMAGAZINES.CO.UK/T3)



Learn how to...

# Get more from File Explorer



Your guide *Rob Mead-Green* says...  
"Discover new ways to view, edit and arrange files and folders on your PC with these tips and tricks"

## At a glance

### Skill level...

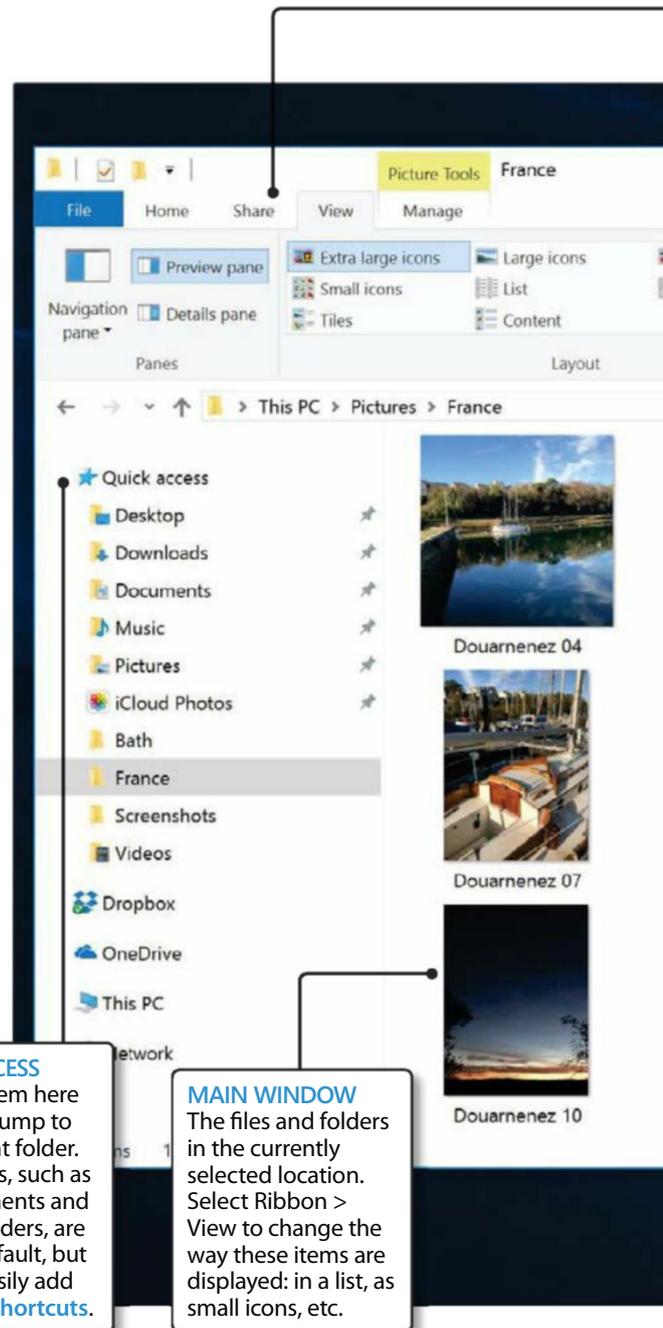
- ▶ Anyone can do it
- Straightforward
- Tricky in parts

### Suitable for...

- Windows 10
- Windows 8.1
- Windows 7

**W**hatever you do in Windows 10, chances are you're going to use the File Explorer at some point. It's the graphical user interface (GUI) that enables you to find, edit, copy, delete and organise your files. And in Windows 10, it carries a myriad of useful features that enable you to do more with ease: from taking a sneak peek at the contents of files without actually opening them; to changing the default file and folder views.

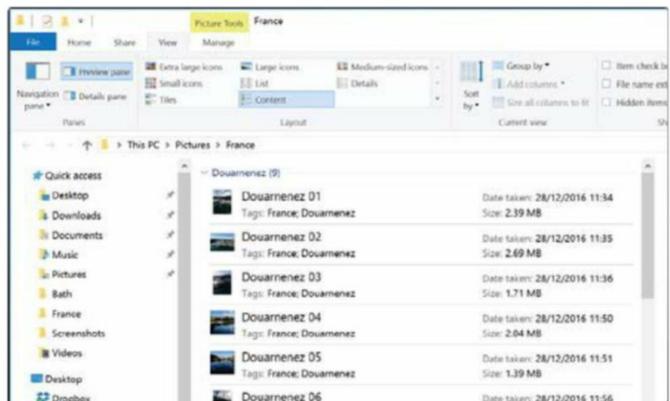
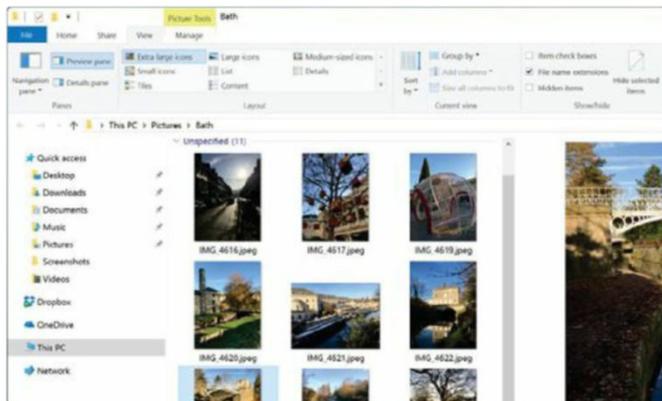
The quickest way to access File Explorer is to click the dedicated shortcut in the taskbar. You can also open it using [Win] + [E]; by clicking its option in the Start menu (just above Settings); or by asking Windows 10's virtual personal assistant, Cortana. In this tutorial we're going to explain the tips, tricks and customisation secrets that can help you master File Explorer. So, let's crack on, shall we?



**QUICK ACCESS**  
Click any item here to quickly jump to the relevant folder. Some items, such as the Documents and Pictures folders, are here by default, but you can easily add your own **shortcuts**.

**MAIN WINDOW**  
The files and folders in the currently selected location. Select Ribbon > View to change the way these items are displayed: in a list, as small icons, etc.

## Step-by-step | Get started with File Explorer



**1 Reveal the Ribbon**  
You may not be able to see the **Ribbon** when you first open a File Explorer window. If that's the case, either click on the down arrow on the right side of the window, or press [Ctrl] + [F1]. You should now see four tabs: File, Home, Share and View. Select View to reveal the different ways you can change how a File Explorer windows contents are displayed.

**2 Change the view**  
Under View > Layout you'll see a range of options, including Large Icons, Small Icons, etc. Mouse over each one to see how it changes the way contents are displayed. To make each change more permanent, click the option you want to use. Now if you close the window, then reopen it again, you will see the change you have made has stuck. You can change the view at any time.

**RIBBON**

The four tabs – File, Home, Share and View – contained in this toolbar let you to perform various actions on files, on folders and on File Explorer itself.

**+** **ROB'S BEST TIP!** **X**

*Need to see file extensions? Head to View > Ribbon and makes sure the 'File name extensions' box is checked.*

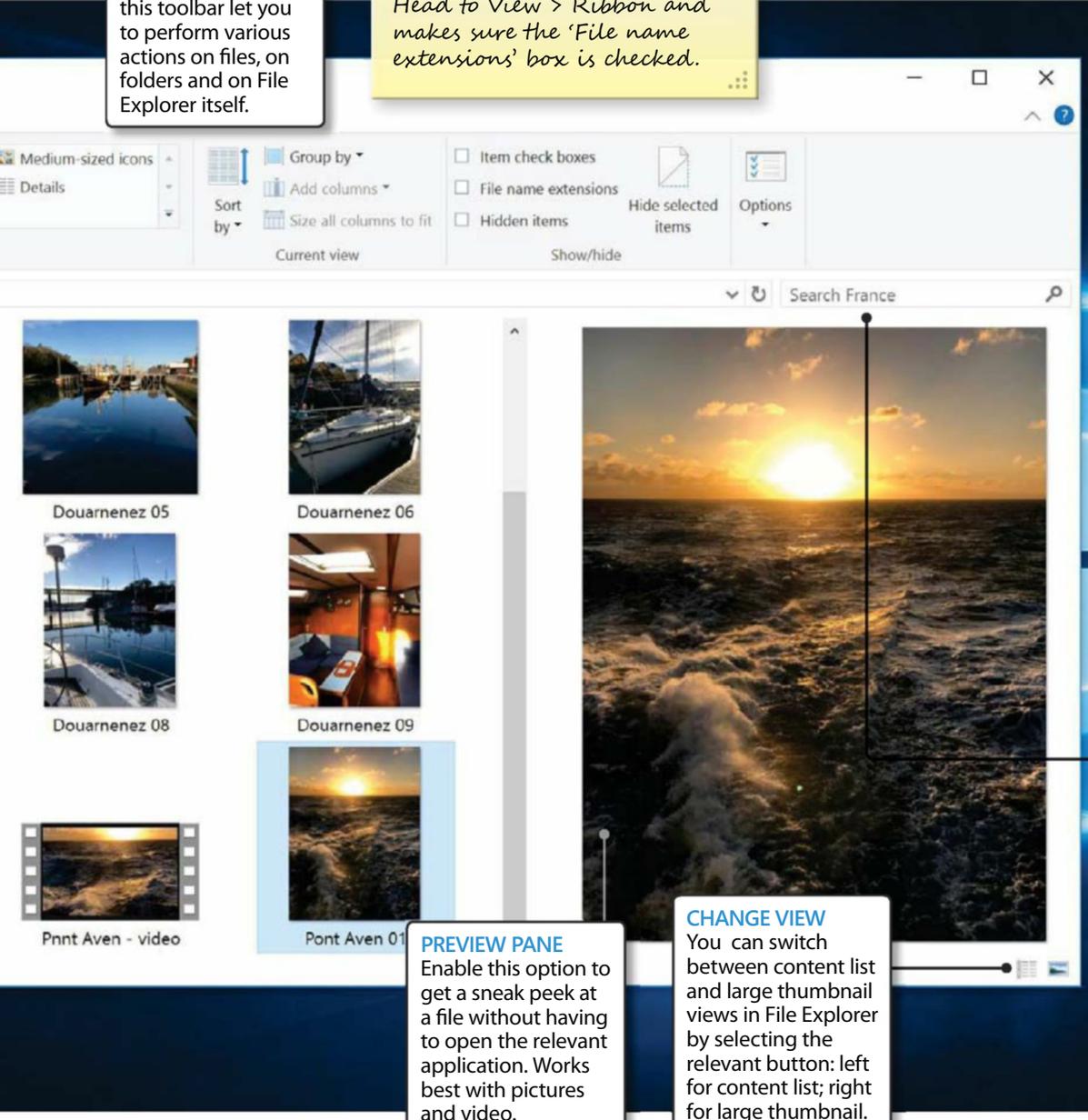
**Jargon buster!**

**▶ Quick Access**  
Previously known as Favourites, Quick Access contains items you're likely to use most often. Certain items are included by default, but you can add whatever you wish.

**▶ Ribbon**  
This toolbar adapts to what you're doing, so the right actions are always available at the right time.

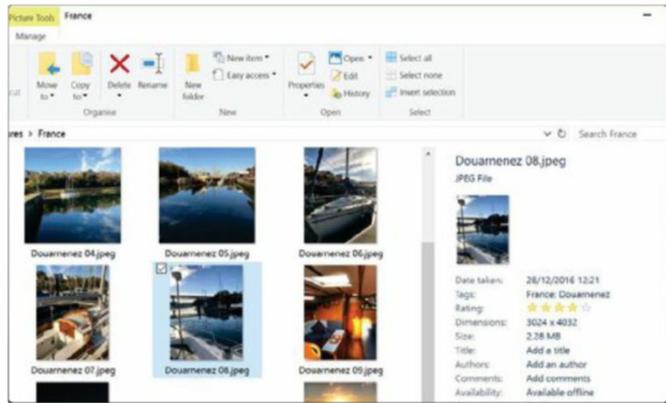
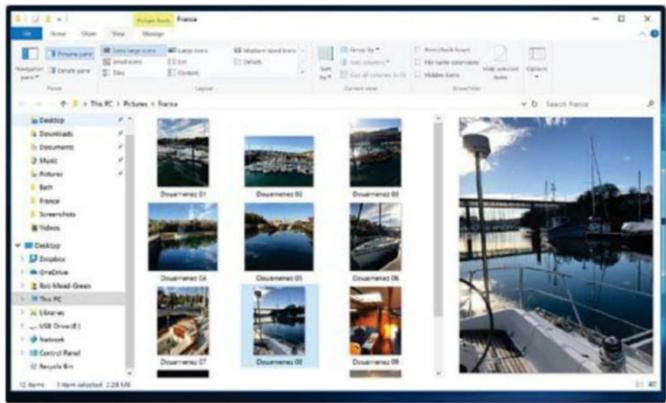
**▶ Shortcuts**  
Combinations of keyboard characters you can use to carry out certain actions. Often listed besides menu commands.

**SEARCH**  
Quickly find any item by typing what you're looking for into the Search box. You can also search your computer using Cortana, of course.



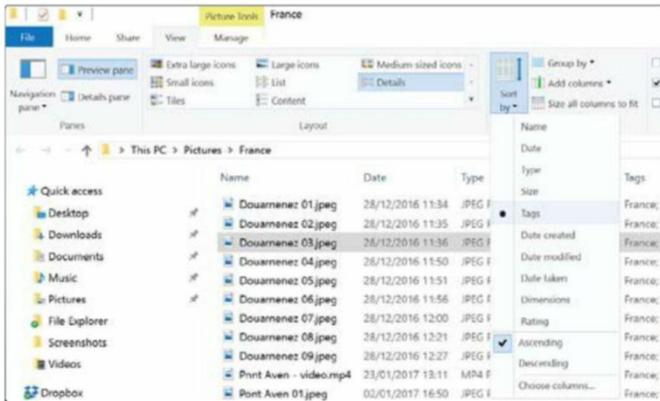
**PREVIEW PANE**  
Enable this option to get a sneak peek at a file without having to open the relevant application. Works best with pictures and video.

**CHANGE VIEW**  
You can switch between content list and large thumbnail views in File Explorer by selecting the relevant button: left for content list; right for large thumbnail.

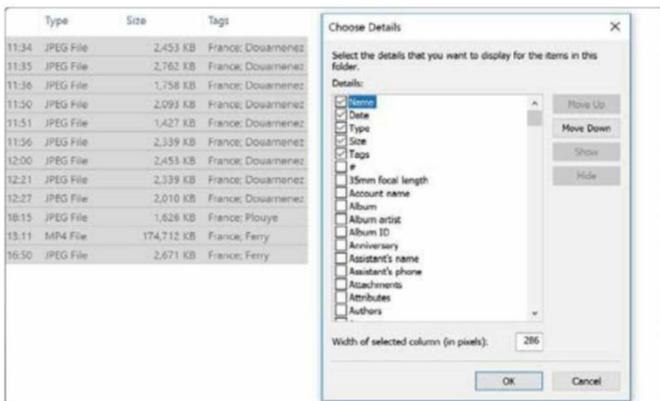


**3 Take a sneak peek**  
Head to View > Panes and click Preview Pane. You'll now see a preview of the currently selected file or files (useful for pictures and video) without having to open it in a compatible application. You can resize the Preview Pane for a closer look by clicking and dragging the grey border to the left (the cursor will change to a double-arrow). Double click to open the file in the relevant app.

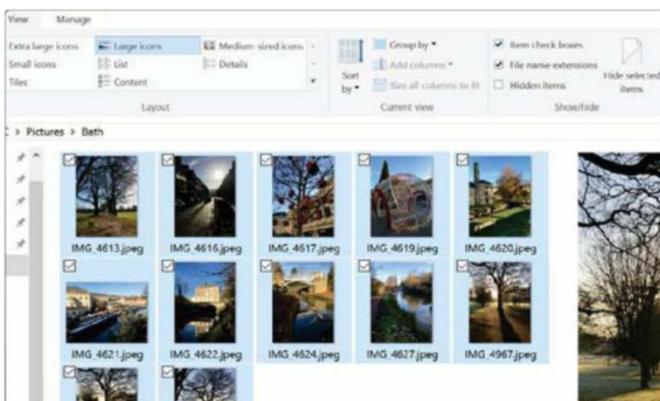
**4 See more details**  
If you want to know more about a file, go to View > Panes and select the Details Pane. This reveals further info, including EXIF data in any photos. As you mouse over some of the details you'll see a grey outline appear around them. This means you can edit them. Double-click to change the current selection. You can add titles, tags, star ratings and other info right in File Explorer.



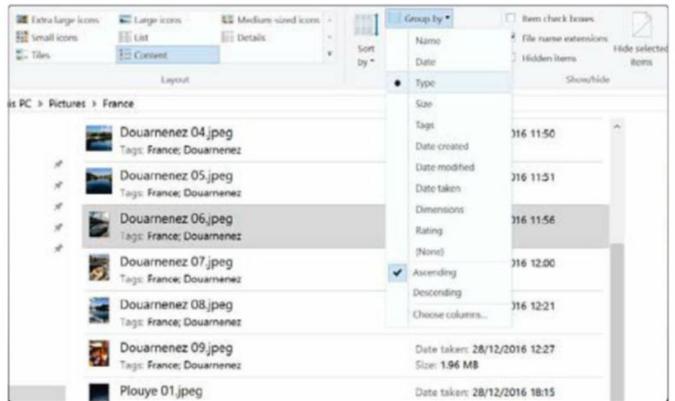
**5 Sort your stuff**  
By default, File Explorer displays items in alphabetical order. To change this go to View > Current View and click Sort By to reveal a drop-down menu. You can view items by name, date, tags or any one of seven other options, as well as in ascending or descending order – handy if you're trying to find the latest version or are trying to save space by weeding out the largest ones.



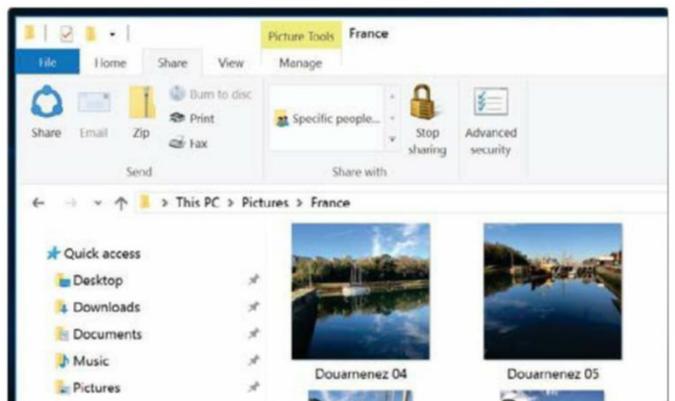
**7 Customise your columns**  
Another way to get at-a-glance info is to customise the columns File Explorer shows. In Layout > Details and Current View > 'Group views' you'll see default columns, but you can change these. Go to Current View > Add Columns and select Choose Columns. A Choose Details window appears. You can now choose the columns you want to see. Click OK once done.



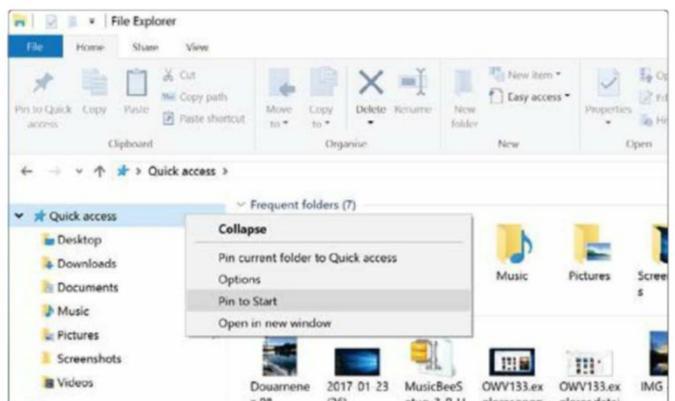
**9 Other File Explorer options**  
While you can select multiple files and folders by clicking and dragging or [Ctrl] + clicking, there is another option. Go to View > 'Show/hide' and select and check the 'Item check boxes' option. Every item will now have its own check box, making it easy to select them quickly. This section also lets you to show or hide file extensions and show or hide individual files and folders.



**6 Form a group**  
You can sort also files and folders into groups. Again this is handy for identifying certain kinds of file, such as any images you have tagged. To do that, go to View > Current View > 'Group by' then choose from your options. You'll see the window layout change to reflect your selection. If you select by File Type, for example, you'll see files are listed under File Type headings.



**8 Share files and folders**  
File Explorer makes sharing easy. Go to Ribbon > Share > Send > Share to upload files to apps and services such as Mail and Facebook. Select Send > Zip to compress them, or use the options in the next column to print, fax or burn them to disc. To share items on a local or public network, select Share With > 'Specific people...', then choose your options from the window that opens.



**10 Customise Quick Access**  
If you regularly access certain items, **Quick Access** can help. It enables you to pin them to its menu, which sits in File Explorer's sidebar. Select the Quick Access menu itself and you will see your favourites on top with recent files below. To add an item to Quick Access, select it, then go to Home > 'Pin to Quick Access'. To remove it, right-click it and select 'Unpin from Quick Access'.

**TERMS AND CONDITIONS** Prices and savings quoted are compared to buying full priced UK print and digital issues. You will receive 13 issues in a year. You can write to us or call us to cancel your subscription within 14 days of purchase. Your subscription is for the minimum term specified and will expire at the end of the current term. Payment is non-refundable after the 14-day cancellation period unless exceptional circumstances apply. Your statutory rights are not affected. Prices correct at point of print and subject to change. Offer ends September 30 2017. For full terms and conditions please visit [bit.ly/magtandc](http://bit.ly/magtandc).

# INTERNATIONAL READERS CAN SUBSCRIBE TOO!

Don't wait for the latest issue to reach your local store – subscribe today and let Windows Help & Advice come straight to you



## WHY SUBSCRIBE?

- Stop paying overseas cover prices and save yourself money
- Never miss another issue
- All 13 issues a year will be delivered direct to your home or workplace by airmail

## TO SUBSCRIBE

- **Live in Europe?**  
Pay just €31 every 3 months
- **Live in the USA?**  
Pay just \$43 every 3 months
- **Live elsewhere?**  
Pay just \$45 every 3 months

TO SUBSCRIBE GO TO  
**[myfavouritemagazines.co.uk/subwha](http://myfavouritemagazines.co.uk/subwha)**

Or call our helpline on (+44) (0)344 848 2852

Helpline opening times are: 8am to 9.30pm weekdays, 8am to 4pm on Saturdays (BST)

# GET STARTED WITH SECURITY CAMERAS

A security camera is many people's first smart home device, and the latest models have sophisticated technology inside them. Here we look at what you should consider before buying one...

**T**here's no doubt that we see more information about security cameras than any other type of smart home product. In fact, browsing the website of one high street electronics store recently revealed no less than 68 different cameras, with the majority falling into the £100 to £200 price range.

Having such a wide range of products, however, can make it difficult to choose one. Whichever you pick there are a number of key features and technologies that are worth thinking about when you buy your first security camera.

## Look sharp

Top of the list for any camera, of course, is image quality. We've all seen news reports on TV with video footage that's so blurry you end up wondering why they

bothered spending any money on a CCTV system in the first place. Most manufacturers provide affordable, entry-level security cameras with 720p resolution (1,280x720 pixels) for around £80, and we'd certainly recommend that as the minimum requirement for a security camera.

Ideally, though, it's worth stepping up to a camera that delivers Full HD video (1080p, or 1,920x1,080 pixels). Netgear's Arlo Q (£170, <http://bit.ly/2kX20vE>), for example, is one of the most affordable cameras of this quality; most cameras designed for indoor use seem to settle at around £160, though we've seen this one for as low as £120.

Full HD cameras will provide much better image quality if you ever need to use footage as evidence in the unfortunate event of a crime. A good camera in this price range should also provide a night-vision mode for low light conditions.

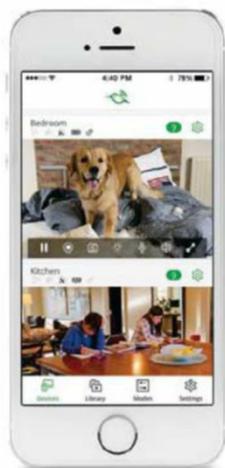
The first generation of smart security cameras was





### If This,Then That

Many home security cameras support IFTTT (If This, Then That), a system which enables devices from different manufacturers to work together. Using IFTTT requires a degree of programming skill, but IFTTT's website (<https://ifttt.com>) provides prebuilt mini-apps, or applets, that will work with many devices.



## How many cameras can I use at a time?

The phone apps for most security cameras enable you to monitor a number of cameras in different rooms around your home. However, some may require additional hardware in order to control multiple cameras, such as the Base Station sold with Netgear's Arlo cameras, or D-Link's Connected Home Hub.

## What about indoor or outdoor use?

Most security cameras are designed to be used indoors, and aren't particularly sturdy. If you want a camera for outdoor use then you should look out for a two-digit IP rating. The first digit refers to resistance to dust and other damaging particles, while the second digit indicates water-resistance. Netgear's Arlo Pro is rated at IP65. See <http://bit.ly/2kQkNWX> for details.



pretty straightforward, relying on simple motion detection to keep an eye on things while you were away from home. If the camera detected any movement while you were out, it would automatically start to record video footage and send an alert to your phone. However, the latest models are starting to use sophisticated artificial intelligence techniques that provide more advanced features.

The Welcome camera (£199, <http://bit.ly/2kAikkQ>) from Netatmo was one of the first to use face recognition technology to tell the difference between a burglar and your kids arriving home from school. Netatmo's newer Presence camera (<http://bit.ly/2l1l6A8>) goes even further; it's a bit

HomeKit. These will enable you to control the cameras by giving verbal commands to Siri on your iPad or iPhone, and use iOS 10's Home app to link the cameras to other devices that also work with HomeKit, such as motion sensors and lighting. The Nokia Home also works with Android devices.

## Sound and vision

Artificial intelligence is advancing in other areas, too. Most security cameras include a microphone so they can record both sound and video, but Swann's SoundView camera (£150, <http://bit.ly/2kAxfeP>) can listen for specific types of sound, such as breaking glass, that might warn you of a possible crime. However, the most advanced sound

# "Intelligence in cameras is improving so that they can, for example, alert you only to human movement, not pets"

pricey at £250 due to being weatherproof for outdoor use, and includes a powerful floodlight, too. It's designed to monitor activity outside your home or office, so Netatmo developed new software that it claims can differentiate between people, pets and passing cars. Netgear's outdoor, weatherproof Arlo Pro (£275, <http://bit.ly/2ku1Yb2>) claims to be able to recognise trees swaying in the breeze so that it doesn't keep sending you false alarms on a windy day.

Logitech's indoor Circle 2 camera (£169-£199, <http://bit.ly/2kcZ613>) is a seriously capable camera and is to gain a 'people recognition' feature, so that it only reacts to human intruders rather than pets wandering into view. And there's Nokia's Home (£170, <http://nokia.ly/2uZO1KR>), and an unnamed camera from D-Link, which will be the first security cameras to support Apple's

technology we've seen so far comes from Cocoon (£159, <https://cocoon.life>). It uses Subsound technology that can pick up faint sounds and vibrations from all around your home, not just in the one room where the camera is located. It can detect sounds such as creaking floorboards, and claims to be smart enough to tell the difference between your kids charging up and down the stairs and a burglar tiptoeing around at night.

There are some other weird and wonderful variations on the security camera theme. Sengled's Snap (£180, <http://bit.ly/2kAo0vb>) sneakily hides a 1080p camera inside a power-efficient LED smart light bulb, enabling you to monitor areas such as hallways or stairs without revealing the presence of a security camera. We also like the Canary camera (£160, <https://canary.is/uk>), which combines a 1080p Full HD camera with a honkingly loud siren, and even a sensor to check humidity and air quality in your home.



## Facts...

**\$47.5bn**

The estimated value of the global home security market in 2020. (RnR Market Research)

**61%**

The amount of smart home spending in the US that's attributable to security cameras. (NPD Connected Intelligence)

**701,000**

The number of burglaries in the UK in the year to March 2016. (Office for National Statistics)

**4.4%**

Baby monitors are on the rise too, forecast at 4.4% global growth every year until 2020. (Transparency Market Research)

While security cameras are often the first smart home device that most of us buy, many cameras are also designed to be used in conjunction with other security devices, such as motion sensors and contact sensors that can be attached to doors and windows around your home.

Examples includes the Hive Motion, and Hive Door or Window Sensors ([www.hivehome.com](http://www.hivehome.com)),

and the Apple HomeKit-compatible Elgato Eve Door & Window, and Eve Motion sensors ([www.elgato.com/en/eve](http://www.elgato.com/en/eve)). Both brands' products will alert you using apps on your smartphone in the event that one of their sensors is triggered.

The Philips Hue Motion Sensor (£35, [www.meethue.com](http://www.meethue.com)) takes a different tack: it switches on nearby Hue lights when it detects movement.

## Five of the best

We recommend five of the smartest security cameras for your home



**COCOON**  
£159  
[cocoon.life](http://cocoon.life)

As well as its 1080p camera and night-vision mode, Cocoon uses Subsound tech to detect sound and vibrations throughout your home. As well as sending alerts to your phone, it has a seriously loud 90dB siren.



**LOGITECH CIRCLE 2**  
£169-£199  
[logitech.com/en-gb](http://logitech.com/en-gb)

There are more advanced cameras around, but we like Circle's ease of use and semi-portable design. It'll spend most of its time in its mains-powered dock, but its rechargeable battery lasts for up to 12 hours.



**NETATMO PRESENCE**  
£250  
[netatmo.com](http://netatmo.com)

Presence is one of the best outdoor cameras you can get right now. It provides 1080p Full HD resolution with night vision, and has a floodlight to scare away intruders. You can save video to an SD card or a Dropbox account.



**NETGEAR ARLO Q**  
£170  
[arlo.com/uk](http://arlo.com/uk)

This 1080p Full HD camera provides two-way audio and night vision. But the best thing about it is that you get to store the last seven days of video footage online for free, with no need to pay a monthly sub.



**NOKIA HOME**  
£170  
[nokia.ly/2uZO1KR](http://nokia.ly/2uZO1KR)

From the company formerly known as Withings, this is a 1080p Full HD camera that works with iOS and Android devices. It's also one of the first security cameras to offer full integration with Apple's HomeKit technology.

## Explained

### NIGHT VISION

Many security cameras claim to have a night-vision mode that enables them to work in low light conditions. However, the better cameras will also include an infrared (IR) emitter that enhances visibility at night.



“The latest models use sophisticated artificial intelligence techniques that provide even more advanced features”

1

### HERE, THERE AND EVERYWHERE

Netgear's Arlo cameras cover all bases; there are indoor and outdoor models, with Wi-Fi or Ethernet, and battery or mains-powered. Netgear's even planning a roaming model with a SIM card for mobile broadband.



2

### LOCAL STORAGE

If you don't want to pay for online storage, the Arlo Pro has a USB port for connecting a local drive. Alternatively, Netatmo's Welcome and Presence cameras include an 8GB microSD card for storing video.

### Quick tip!

Somewhat oddly, Netatmo's Welcome camera includes an 8GB microSD card, but doesn't provide an online storage option. You can link it to a Dropbox account to store your security footage online, though.



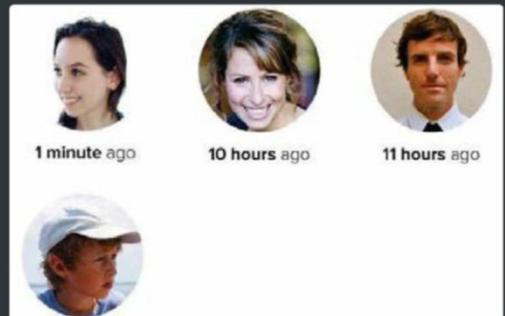
## HOW TO TELL VISITORS AND STRANGERS APART



Your **Netatmo Security** products can be assisted by your phone's location to confirm if you are home or away.

### 1 Home and away

Like most security cameras, Netatmo's Welcome can track your location through its app on your phone. You can link it to other family members' phones too, so it knows when your home is empty and to keep watch.



### 2 Face to face

Netatmo's Welcome was one of the first security cameras to use face recognition. As soon as you turn it on, it starts to note each new face it spots. Then you just hold a finger on a face in order to identify that person.

WHAT ELSE SHOULD I CONSIDER?

# ONLINE STORAGE COSTS

You can view live video for free, but other features may cost you

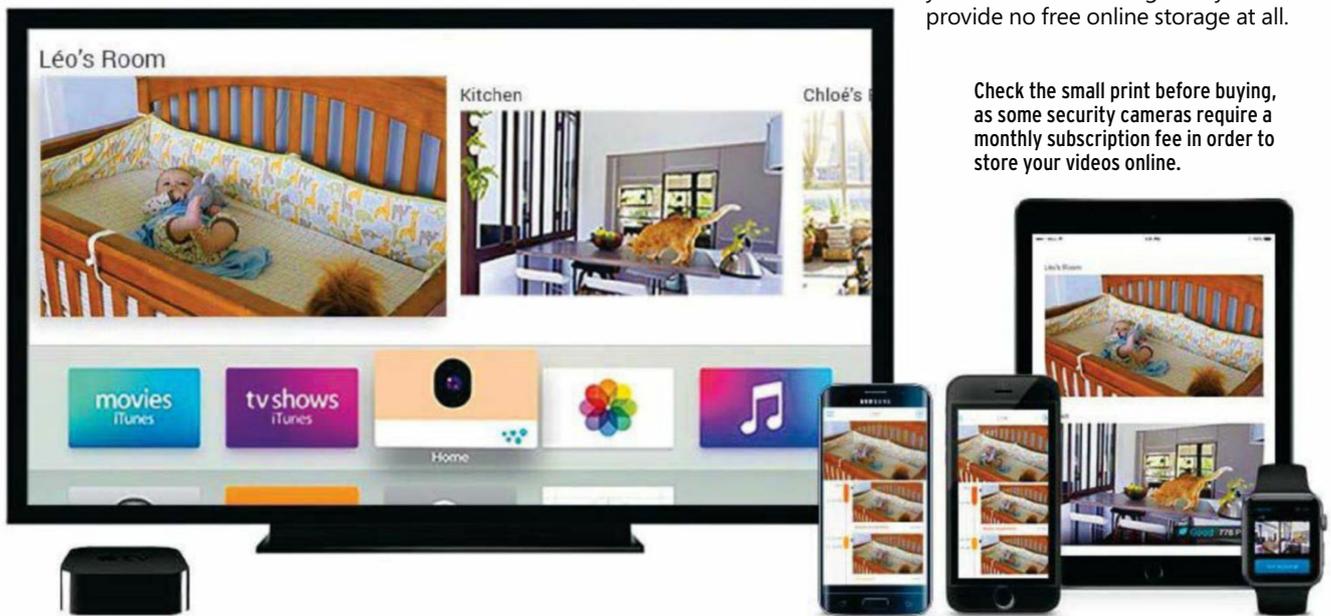
**W**hen your security camera detects an intruder, it usually sends an alert to your phone and then streams the video so you can see what's going on. However, you may need to store recordings for longer, perhaps as evidence of a crime.

Unusually, Netatmo's Welcome and Presence cameras include a microSD card to store video directly on the camera itself. In contrast, most manufacturers opt to use online storage instead, and this is where you need to watch out for hidden costs.

Netgear's Arlo cameras enable you to store video footage online for

seven days for free, which should be enough for most people. Beyond that period, it charges £6.49 per month to store your recordings for 30 days. Logitech's Circle 2 stores video for 24 hours for free, before charging £2.99 per month for 14 days of storage. Swann's SoundView camera and the Sengled Snap, however, only provide you with live streaming – they provide no free online storage at all.

Check the small print before buying, as some security cameras require a monthly subscription fee in order to store your videos online.



**3 The spying game**  
You don't need to worry about family members, but if there are people who only visit occasionally, you can tell the camera how to react: to record one video on arrival, or to keep an eye on them the whole time.



**4 Stranger danger**  
If the camera spots a face it doesn't recognise, such as this delivery driver, it will automatically record video and send an alert to your phone. It will also take a pic so you can add that person to the app if you want.

## Power over Ethernet

Most security cameras run off batteries or mains power, but some can use PoE, or Power over Ethernet, which enables the camera to get both power and internet access from a single cable. This can be really useful if you want to install several cameras around your home or office.



# KEEP 7 WINDOWS ALIVE

Still using Windows 7? Here's how to make sure it continues to run perfectly

**D**espite its age, Windows 7 is still the most widely-used version of Windows used today, and while Microsoft has released a number of successors – including the popular Windows 10 – many people are sticking with what they know. Sticking with an older operating system because you're comfortable using it is understandable, however as Windows 7 becomes older, there are certain things you need to do to ensure that it is running as well as it could be. This doesn't just mean updating Windows 7 to take advantage of the technological advancements that have been made in the seven years since it was launched – it also means making sure it remains safe and secure

against new security threats from the internet.

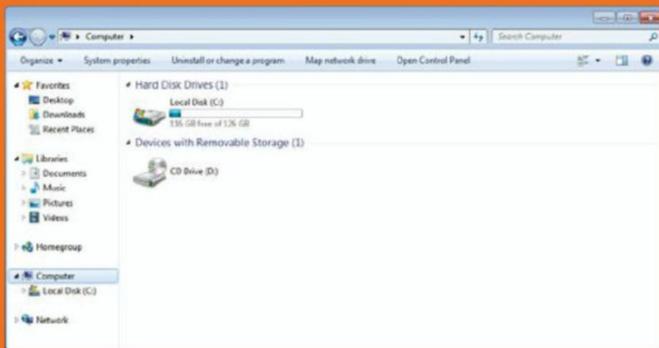
In this guide we will show you everything you need to do if you wish to keep using Windows 7, while making sure that the operating system performs well.

After seven years of use, you may also find that Windows 7 is beginning to feel a little sluggish – we'll also show you what you need to do to put a spring back in Windows 7's step, and to help you continue to enjoy Windows 7 for years to come.

If you end up feeling like it's time to move on from Windows 7, then check out the guide on how you can still upgrade to Windows 10 for free at <http://www.techradar.com/how-to/software/operating-systems/how-to-upgrade-to-windows-10-for-free-1325764>.



# How to keep Windows 7 running well



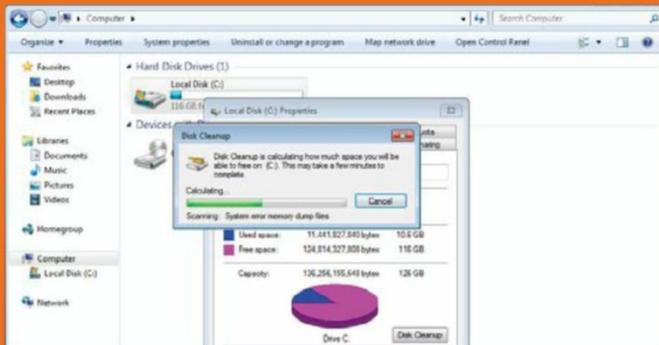
## 1 Do some spring cleaning

It is highly likely that if you're using Windows 7, you're running it on an older machine that has seen a fair few years of active duty. In this time you've probably accumulated hundreds, if not thousands of files, folders and programs, and all this clutter can slow down Windows 7. The first thing you should do, then, is clean up your hard drives.



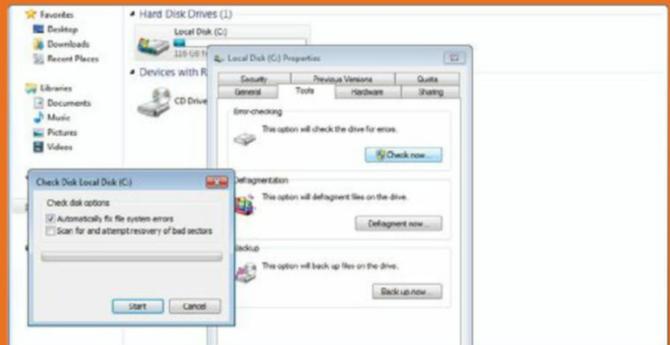
## 2 Uninstall programs

Your first step to cleaning up Windows 7 is to uninstall any applications or programs that you don't use anymore. If you've been using Windows 7 for a long time, this list could be very long! To do that, open the Start menu and select Control Panel. From there, select 'Uninstall a program' and choose which programs you want to remove from Windows 7.



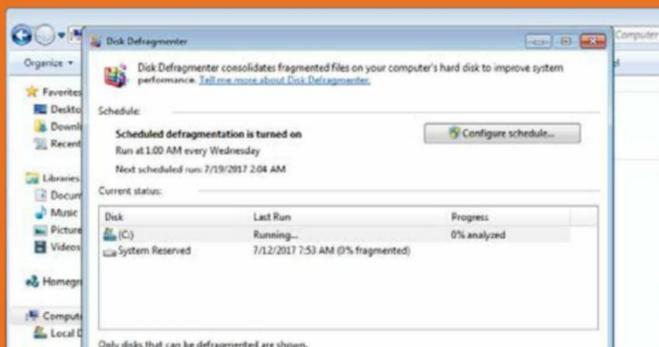
## 3 Clean up your hard drive

Next, you'll want to clean up your hard drive of any useless clutter you've accumulated. Double-click on the Computer icon on your desktop. This will display all your hard drives, along with any USB drives and CD/DVD drives. Right-click on your hard drive, then select Properties. A window will open – click Disk Cleanup, select the files you want to remove, then click OK.



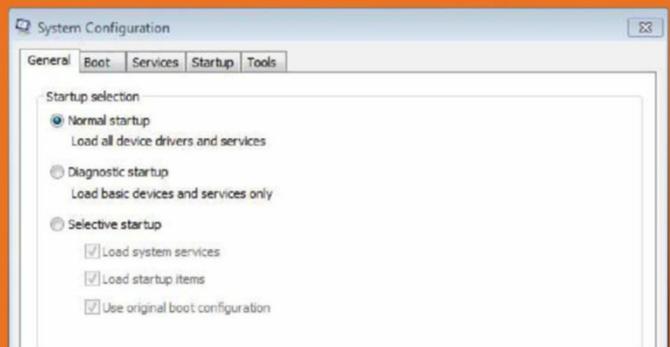
## 4 Give your hard drives a health check

If you've been using your PC for a while, its hard drive may need checking to ensure it's running ok. First, right-click your hard drive from the Computer window, go back to Properties, then click the Tools tab. Under 'Error-checking' click 'Check now' and let Windows check your disk. Select 'Automatically fix file system errors' to fix any problems. You may need to restart your PC.



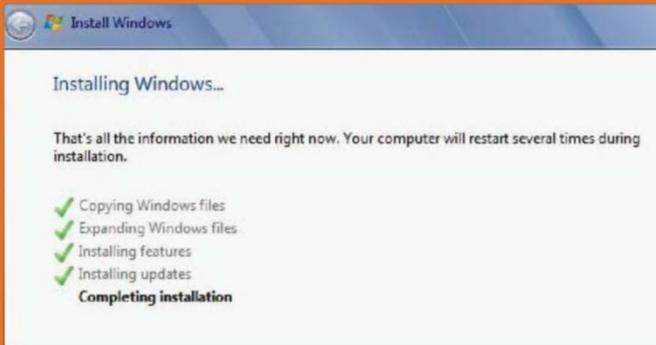
## 5 Defragment your hard drive

This is a bit of a blast from the past. With modern Windows, or solid-state drives (SSDs), you don't need to worry about file fragmentation – where files are scattered in parts across the drive. With Windows 7 and traditional hard drives, defragmenting it regularly can help keep it running speedily. From the same tools tab in Step 4, click on the 'Defragment now' button.



## 6 Clean out Startup programs

You may have installed programs that start up when Windows 7 loads. If a number of programs do this at the same time, this can slow your PC down and cause Windows 7 to take a long time to boot. To stop programs loading, either uninstall them or press [Win] + [R] and type 'msconfig'. Click the Startup tab, then deselect any programs you want to stop loading at boot.



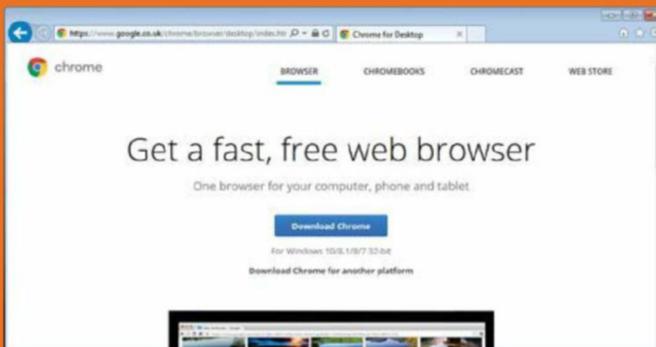
## 7 Reinstall Windows 7

If Windows 7 is running very slowly, reinstalling can help it perform better. Before you begin, make sure you have your Windows 7 installation CD and key. Also, make sure you save any important files and folders before you begin. If your hard drive failed a health check in Step 4, install Windows 7 on a new drive. Installing it on an SSD will give further performance increases.



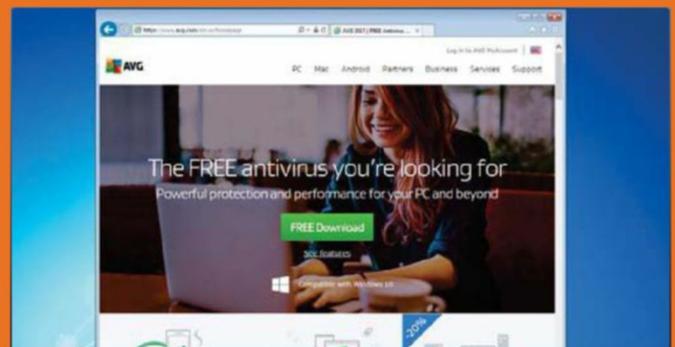
## 8 Update Windows 7

One of the most important things you can do is make sure Windows 7 is up to date. Microsoft will continue to provide security updates and bug fixes for Windows 7 until 2020, and you must have Service Pack 1 installed to receive them. To check, open Start and type in 'Windows Update'. Select the top search result, and if updates have been found, click 'Install updates'.



## 9 Stop using Internet Explorer

While Internet Explorer 11 is still getting security updates from Microsoft, the company has turned its attention to Edge, which isn't available for Windows 7. Instead, download Chrome (<http://bit.ly/1LOGdwL>) or Firefox (<https://mzl.la/2vap2Vc>), which bring modern features and security updates to Windows 7. It's easy to import your bookmarks from Internet Explorer as well.



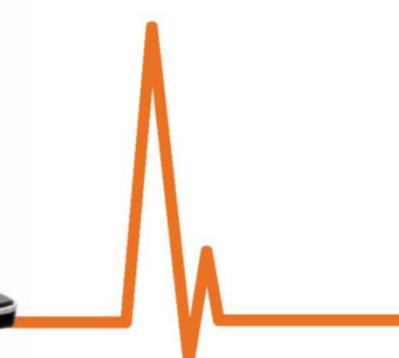
## 10 Use anti-virus – and keep it updated

Using an older – yet still very popular – operating system like Windows 7 can make you a target, so make sure you have a good anti-virus program and you keep it updated. While Windows 10 comes with Windows Defender built-in, Windows 7 doesn't, so try Microsoft Security Essentials (<http://bit.ly/2w364wb>) or free alternatives such as AVG Free (<http://bit.ly/2w3667h>).



## Talk to your PC

The Cortana voice assistant is a big feature of Windows 10, but you can get a similar experience in Windows 7 by installing Google Chrome, then tapping the microphone icon on the Google homepage.





# Support

▶ WINDOWS HELP ▶ HARDWARE FIXES ▶ SOFTWARE SOLUTIONS ▶ INTERNET TIPS



Do you have a PC problem? Get in touch...

Email complete details of your problem to the support team and we'll do our best to help [windowsmagazine@futurenet.com](mailto:windowsmagazine@futurenet.com)

## Backing up **FIX BACKUP AND RESTORE ERROR**

**Q** I'm running a new PC and have switched from Windows Live Mail to Outlook. Recently, after using the old Windows 7 Backup tool to back up to my external hard drive I received the following error: "Check your backup results. The backup completed but some files were skipped". I investigated further to discover two errors

(0x80070002) referring to C:\Users\defaultuser0\Contacts and C:\Users\defaultuser0\Searches respectively (neither file could be found). The Windows Troubleshooter was no help – can you resolve this please?  
**Allan Bolton**



### Cat's solution

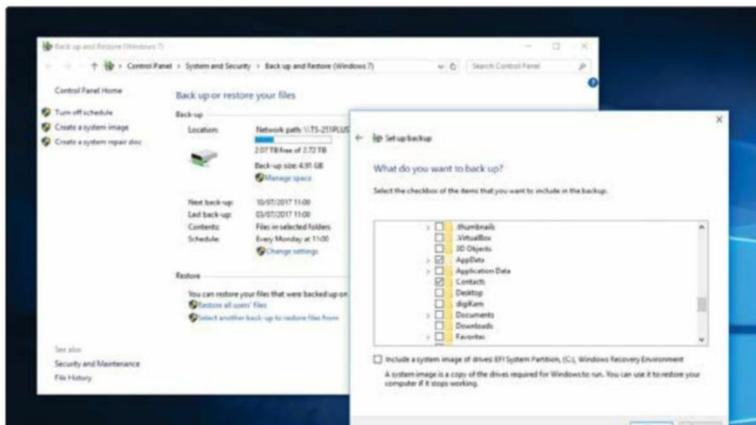
This is a well-known error, and the good news is that you can safely ignore it if you wish – the

backup still works. However, you may want to remove the annoying message that will continue to appear. Open Backup and Restore - press [Win] + [R], type 'sdclt.exe' and click OK – and then click 'Change settings'. Click Next, then select 'Let me choose' if necessary and click Next again.

Expand 'Data Files' followed by 'Your username's Libraries' > Additional Locations and clear the tick boxes next to the AppData folder, Contacts and Searches. Now expand Computer > C: > Users > 'Your username' and tick the AppData, Contacts and Searches folders if they exist. Click 'Next' followed by 'Save settings and exit', then perform a fresh backup to verify the issue has been resolved.

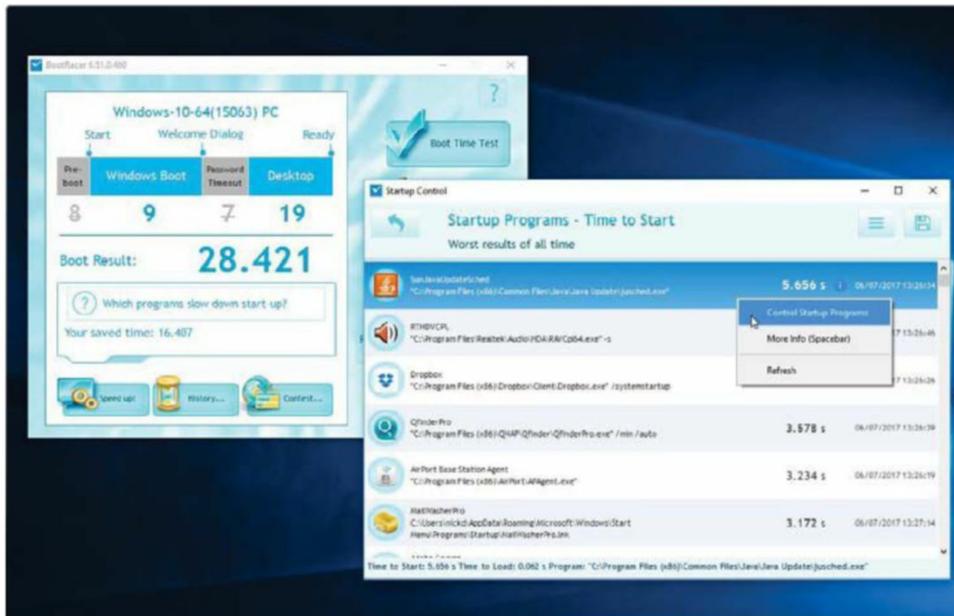
## Windows **RESET FORGOTTEN PIN**

**Q** I have set up my Windows 10 PC, so I only need a password to sign in. I have lost my PIN for my Microsoft account. Do I still need a PIN and how do I get it back?  
**Graham Jones**



**FIX ERROR** Resolve selected backup errors by changing what's backed up.

**FIND THE SOLUTION!** Data Crow video tutorials  
Need help using the Data Crow media cataloguing app? Check out the videos on its YouTube channel at <http://bit.ly/data-crow>



**MONITOR BOOT** Discover what slows your PC's start times with BootRacer.

### Quickfire questions

**Why has my printer suddenly start displaying its properties in a foreign language?**  
**Terri Smith-Jones**

Go to Start > Settings > Devices > 'Printers & scanners', click on the printer and choose Manage. Work through your options looking for a language option. If this doesn't work, uninstall the printer driver and then reinstall it.

**Why can't I get my Gioteck VX-2 wireless game controller to work without using a cable?**  
**Peter Lewick**

If it's the Playstation 3/PC model, then the wireless connection will only work with the PS3, sadly.

## "A lot of people have complained on user forums about the Creators Update resulting in noticeably slower boot times"



### Rob's solution

Assuming you're referring to the PIN you can assign to Windows 10 to speed up logins, then they're easy to remove (or replace) because they're device-specific and can be bypassed using your account password. Once logged into your Windows user account, click Start > Settings > Accounts > Sign-in Options. You'll see options to change, remove or reset your PIN. Change won't work because you have to know the PIN to change it, but you can reset your PIN by clicking 'I forgot my PIN', or remove it – enter your account password when prompted. Once done, you can then set up a new PIN.

The pre-boot time should be around 3-5 seconds on a PC with Fast Boot enabled – if not, check your UEFI settings to see if the option's available (it should be on most modern PCs).

If the bottleneck appears to be linked to the Windows Boot portion of startup, it may be caused by disk errors. Right-click the Start button and choose Command Prompt (admin), then type 'chkdsk c: /f /r /x' and hit [Enter], rebooting your PC to run a check. Be patient – it may take some time to complete and appear to be stuck. If this doesn't

**WORD REPLACEMENT**  
**AbiWord is a solid – and free – word processing app.**

### Jargon buster!

#### ► Aero Peek

A feature that enables users to temporarily peek at the desktop behind any open windows. Roll the mouse to the bottom-right corner of the desktop to activate it.

#### ► AppData

A hidden folder that contains user-specific configuration data stored by Windows and third-party programs.

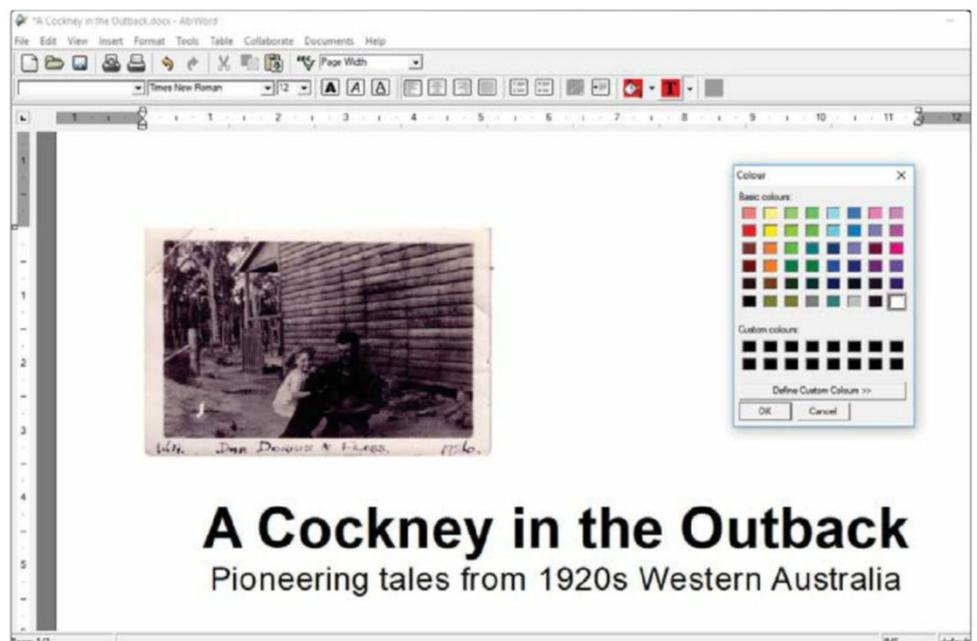
### Windows IDENTIFY BOOT BOTTLENECKS

**Q** Since installing the Creators Update, my PC is taking much longer to boot. Any pointers?  
**Julia Rendbury**



### Ian's solution

A lot of people have complained on user forums about the Creators Update resulting in noticeably slower boot times. The key thing is to pinpoint where the bottleneck occurs. To determine where it is, download and install BootRacer ([www.greatis.com/bootracer/](http://www.greatis.com/bootracer/)), which will time your boot and split it into four stages.



## Quickfire questions

I wish to install the Creators Update on my HP laptop. Is it best to leave the PC plugged in while it happens? I don't want to overcharge the battery.

**Graham James**

The battery is designed not to overcharge – when it's at 100 per cent, the charger acts as a straightforward power adapter, so leave the laptop plugged in while updating.

How can I stop my open windows disappearing whenever the mouse cursor is placed in the bottom right-hand corner of the desktop?

**Natalie Sawicka**

Roll your mouse to the bottom right corner of the Taskbar and right-click to reveal a pop-up menu – untick 'Peek at desktop' to disable the feature.

I want to write some free-form biographies of ancestors. Which family history tool can help with this?

**Allie Cookson**

Family Tree Maker's Smart Stories is a great tool – see [www.mackiev.com](http://www.mackiev.com) to order – or try My Family Tree, which is available free from [www.chronoplexsoftware.com](http://www.chronoplexsoftware.com). Select your ancestor and click 'Photos and story' to access a more basic story tool.

improve matters, go to Start > Settings > System > 'Power & sleep' > 'Additional power settings' and verify 'Turn on fast start-up' is enabled under 'Choose what the power buttons do' (if it's not, click 'Change settings that are currently unavailable' to tick the box).

Finally, a lengthy Desktop time refers to start-up programs (click Enable Control for more detailed analysis to identify the culprits). You can then disable these within BootRacer or via the Start-up tab under Task Manager.

### Microsoft Office I'M HAVING TROUBLE RUNNING WORD 97

**Q** I am trying to run Office 97 under Windows 7. During installation, I was informed CTL3D32.dll was missing – I subsequently installed it, but every time I launch Word it asks me if I want to revert to the saved file name. The program closes regardless of whether I answer yes or no. Excel and other Office apps work fine. Please help!

**Alan Puffett**



#### Rob's solution

Office 97 isn't technically compatible with Windows 7, even though you have managed to get the other apps working. We'd suggest that you upgrade to a compatible version of Office (Office 2003 or later) or switch to an alternative office suite. Given the other apps appearing to be working correctly you could look to simply replace Word with AbiWord ([www.abisource.com](http://www.abisource.com)), or you could go the whole hog and install LibreOffice ([www.libreoffice.org](http://www.libreoffice.org)). You can run both programs alongside each other as well as Office 97 while you decide which one is best for you.

### Hardware PC WON'T BOOT SUCCESSFULLY

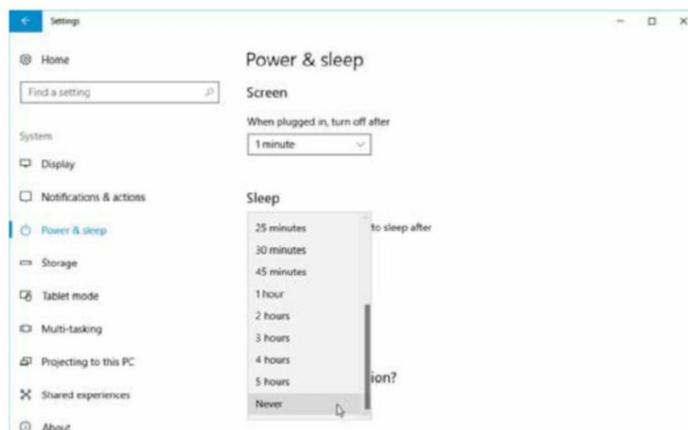
**Q** After successfully installing the Creators Update followed by my NVIDIA graphics drivers, Windows 10 will no longer boot – after 10 minutes of going nowhere it puts me into Repair mode and then finally allows me to restart in Safe mode. Can you provide me with some pointers for what I should try and do next?

**Tony Prodger**



#### Matt's solution

We first thought the problem might be the driver update, so pointed Tony to a tool he could use in Safe mode (Display Driver Uninstall Tool, available at [www.wagnardsoft.com](http://www.wagnardsoft.com)). However, the situation quickly deteriorated – and switching to another graphics card known to work with Windows 10 had no effect. Eventually, his power supply failed after a fan jammed, and after replacing this, Tony was forced to reinstall Windows 10 from scratch. Everything proceeded normally except for a power-saving issue whereby the PC would freeze after 10 minutes, when it tried to



**DISABLE SETTINGS**  
Use this workaround to avoid sleep-related crashes.

## FIX CD-TAGGING PROBLEMS

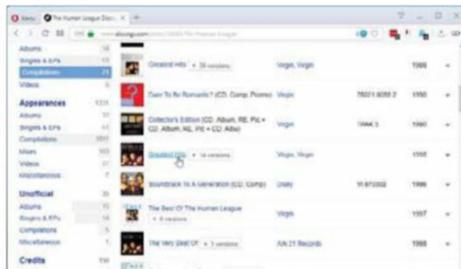
**Q** I've been using Mp3tag as recommended in issue 136's cover feature. I have some CDs with generic names that the Discogs search can't find. Can you help?

**Roy Palmer**



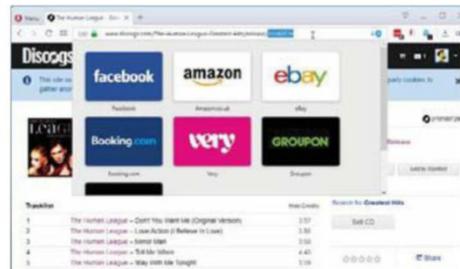
#### Nick P's solution

If you upgrade to the latest version of Mp3tag – version 2.83 or later – you'll find that a new option has been added to the Tag Sources list: Discogs Release ID. Here's how to use the app to find the correct match for your CDs.



### 1 Locate album on Discogs

Point your web browser to [www.discogs.com](http://www.discogs.com) and search for the artist in question. Click their artist entry and then use the Releases sidebar on the left to locate the album, single or compilation you're after. Click its title to access its page.



### 2 Discover release ID

Scroll through the list of releases looking for an exact match (typically UK or Europe) using the catalogue number to help identify it. Click this release, verify it's the correct one and then copy its ID from your browser's Address bar.

enter low-power mode. By going to Start > Settings > System > 'Power & sleep' you can set the Sleep setting to Disable to work around the problem while carrying out other troubleshooting options.

## Windows CREATORS UPDATE IS FULL OF GLITCHES

**Q** There seems little point in installing this update if it comes with a whole load of problems. Edge has stopped working, System Protection was turned off and all Restore points deleted, and my boot time has more than doubled. Will Microsoft be issuing a fix for all these problems? All my Windows 10 computers are similarly affected. I've tried the fix at Microsoft Help but no change – do have you any advice or solutions?

**David Reece**



### Nick P's solution

We sympathise with your plight, David. It seems Microsoft switches off System Restore after every major update – I don't know if that's to stop people trying to roll back through System Restore rather than via Settings > 'Update & security' > Recovery, but the fact it's not advertised is poor form.

The Edge browser problem has affected some machines, but not all (it works perfectly on all our test PCs, for example). We tried to fix this on another reader's PC and were forced in the end to suggest a repair or even a clean install.

This option may seem like overkill, but if you upgraded to

Windows 10 from Windows 7 or 8 and haven't performed a clean install since, it may be time to bite the bullet and clear everything out by following this month's cover feature, starting on page 14.

## Email WINDOWS LIVE MAIL REPLACEMENT

**Q** Had trouble with my PC and went back to square one by reloading Windows 10. Then Microsoft took an hour to update it and I've been left with this awful Mail app instead of Windows Live Mail. How can I get Outlook or Windows Live Mail again? At 85 I'm getting too old for this pretty stuff – wish I'd stayed with Windows 7!  
**Harold Tokins**



### Cat's solution

Unfortunately, Microsoft has retired Windows Live Mail completely.

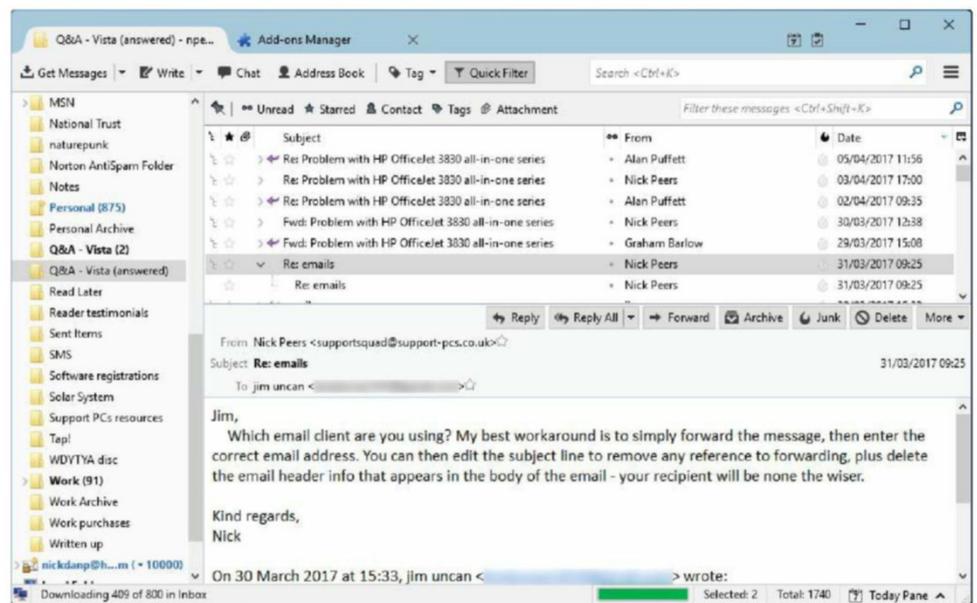
We suspect that by Outlook that you mean Outlook Express, which is also long gone – while some people have managed to get both programs working in Windows 10 briefly, major updates led to them breaking again.

The best way to future-proof yourself is by switching to Mozilla's highly acclaimed Thunderbird email program, which is available at [www.getthunderbird.com](http://www.getthunderbird.com) – there's a bit of a learning curve at first, sadly, but its user interface is relatively straightforward and it'll continue to work in future versions of Windows too.

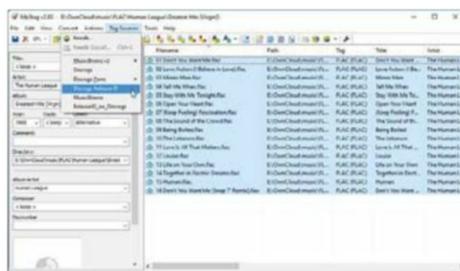


## Do you have a PC problem? Get in touch...

Email full details of your problem to the support team and we'll do our best to help: [windowsmagazine@futurenet.com](mailto:windowsmagazine@futurenet.com) Or you can write to the support team at: **Support Squad, Windows Help & Advice magazine, Future Publishing Ltd, Quay House, The Ambury, Bath BA1 1UA**

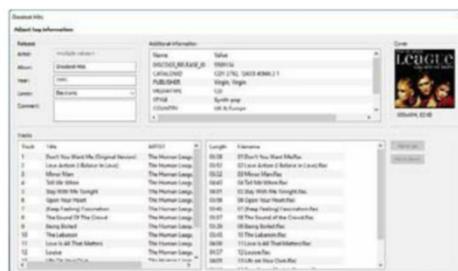


**"The best way to future-proof yourself is to switch to Mozilla's highly acclaimed Thunderbird email program"**



### 3 Input release ID

Open Mp3tag and choose File > Change Directory... to select the folder of the album that you wish to tag. Now select all the tracks and open Tag Sources > Discogs Release ID. Paste in the release ID from the previous step and then click Next.



### 4 Match and tag

Check the information matches (and make sure the tracks line up correctly) – click OK to tag your files with the metadata provided. If no cover is provided, you could download this separately from Discogs and manually add it to your files.

## Jargon buster!

### ► Discogs

An online music database, which contains information and artwork for millions of artists, albums, singles and compilations that can be added to other programs.

### ► Fast Boot

A boot method employed by modern PCs to speed up startup by – among other things – bypassing certain checks and streamlining hardware initialisation.

# techradar.



The home of technology

[techradar.com](http://techradar.com)



Welcome to...

# Windows 10

▶ WINDOWS 10 TIPS ▶ FEATURES EXPLAINED ▶ NEW TIPS AND TRICKS

## Welcome



**Just starting your Windows journey? Confused by the changes Microsoft has made to the**

**Creators Update? Maybe you just want to learn something new about Windows 10. Well, this is the section for you!**

There's not enough space to tell you absolutely everything you need to know here, but *Windows Help & Advice* always has your back. In our essential Basics section, we'll show you how to: master the desktop and make it work for you; customise the Start menu and quickly access favourite items using tiles; and how to get the best from Windows 10's virtual personal assistant, Cortana.

**Matt Hanson**  
Associate Editor

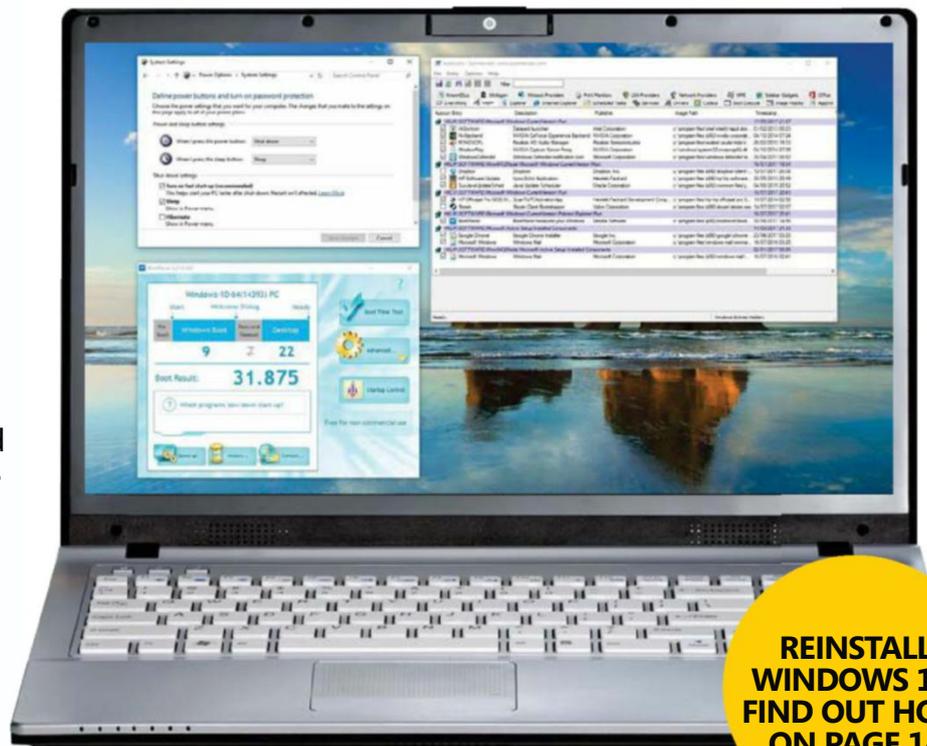
[www.facebook.com/windowsmag](http://www.facebook.com/windowsmag)

## Featuring...

**76** How to master the Windows 10 desktop

**78** Change the way the Start menu works

**80** Discover the ways Cortana can help you



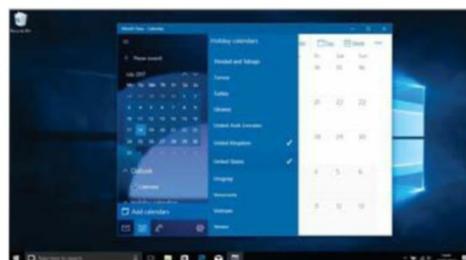
**REINSTALL WINDOWS 10! FIND OUT HOW ON PAGE 14**

## Windows 10 tip of the month

### Customise the Calendar app

# Change the way that Calendar looks

Windows 10's built-in Calendar is a great way to organise your day. But you can make it easier and more attractive to use with a couple of simple tricks, which we're going to show you right here. You can open the Calendar in three different ways: by choosing its app icon from the Start menu; by typing 'calendar' in the Search box; or by saying 'Hey Cortana, open Calendar'. You can even ask her to open it on a specific date.



**DATES** Click 'Add calendars' and choose a country from the 'Holiday calendars' list to add its public holidays.



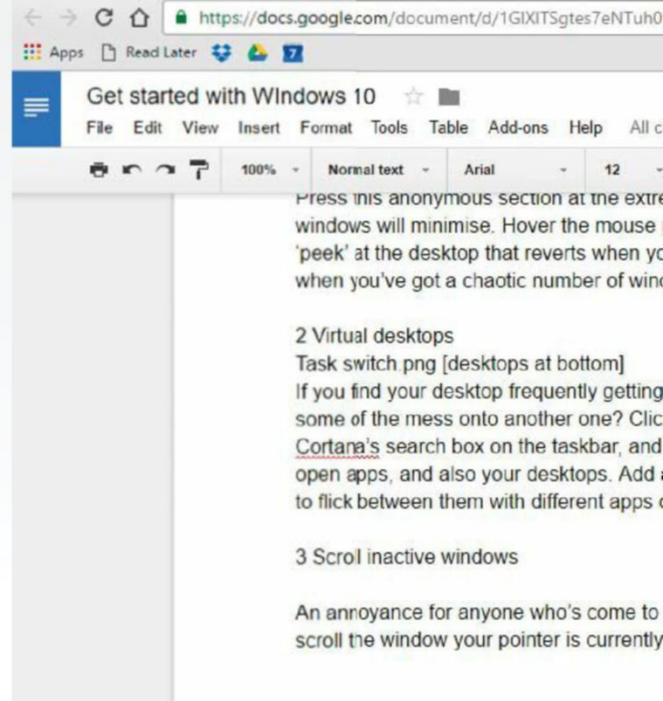
**LOOKS** Go to Settings > Personalisation to change the selected calendars accent colours and background.

# Master the desktop

You'll spend a lot of time there, so here are some great ways to make it work for you...

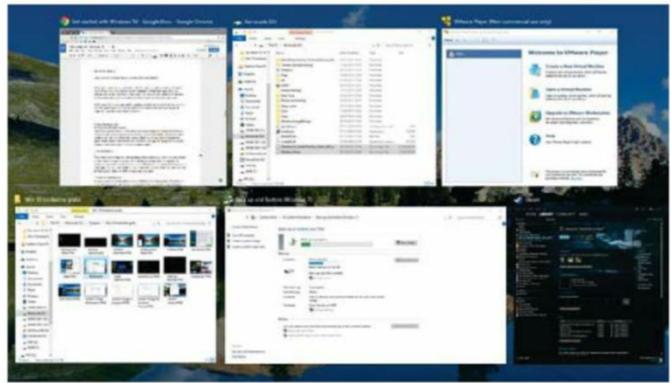
**W**hen not actually using applications, the Windows desktop is where you'll spend much of your time, moving files about, hunting for that obscure application you installed six months ago and suddenly need, or lining up your windows so that they fill the space perfectly (a time-wasting

pastime that's all but dead now thanks to window snapping). In Windows 10, the desktop and the taskbar get a few new tricks that make working with files and folders even easier, and the new search bar means pulling up an application you don't use often is a breeze. Follow these tips to a happy start...



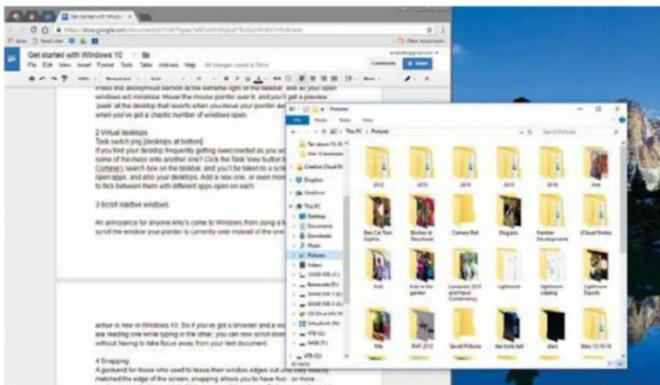
## 1 Show desktop/peek

The Show Desktop button isn't marked, and some people don't even know it exists. Press this anonymous section at the extreme right of the taskbar, and all your open windows will minimise. Hover the mouse pointer over it, and you'll get a preview 'peek' at the desktop that reverts when you move your mouse pointer away. It's very useful when you've got a chaotic number of windows open on your desktop.



## 2 Virtual desktops

If you find your desktop frequently getting overcrowded as you work, why not offload some of the mess onto another one? Click the Task View button to the right of Cortana's search box on the taskbar, and you'll be taken to a screen that shows your open apps, and also your desktops. Add a new one, or even more, and you'll be able to flick between them with different apps open on each. It's a great way to stay organised on your PC.



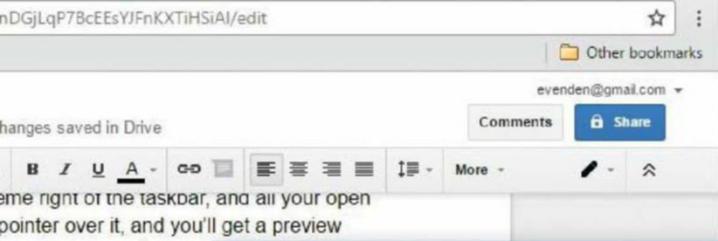
## 3 Scroll inactive windows

An annoyance for anyone who's come to Windows from using the Mac, the ability to scroll the window your pointer is currently over - instead of the one that's currently active - is new in Windows 10. So, if you have a browser and a word processor open, and are reading one while typing in the other, you can now scroll down in the browser without having to take your focus away from your text document.



## 4 Window snapping

A real godsend for those who used to tease their window edges out until they exactly matched the edge of the screen, snapping in Windows 10 enables you to have two or more windows open that completely fill their areas of the screen. Pick up a window and move it to the extreme left or right edge of the desktop to try it (you'll see it 'snap' to the new half screen format). You can adjust how much of the screen they take up too.



# Welcome to Windows 10

## Master the desktop

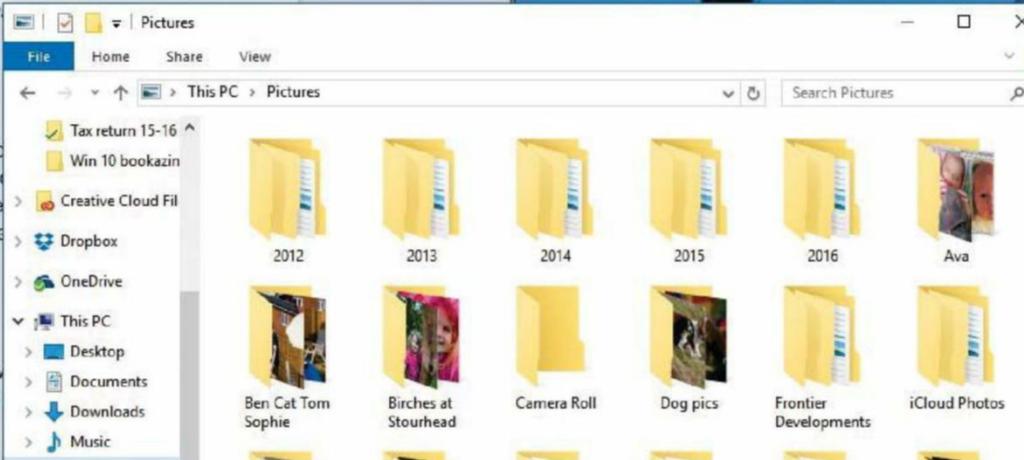
changes saved in Drive

me right of the taskbar, and all your open

pointer over it, and you'll get a preview

you move your pointer aw

ows open.



overcrowded as you wo

ck the Task View button to

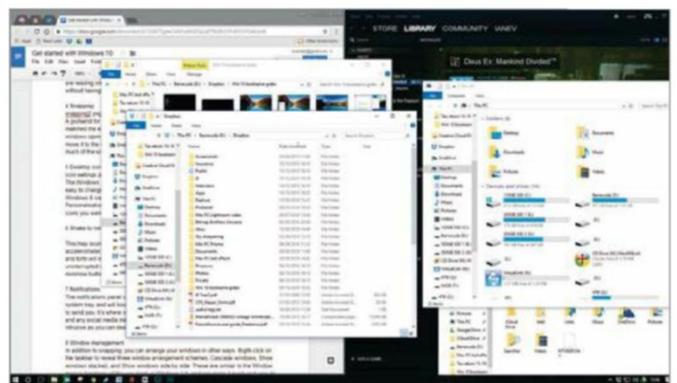
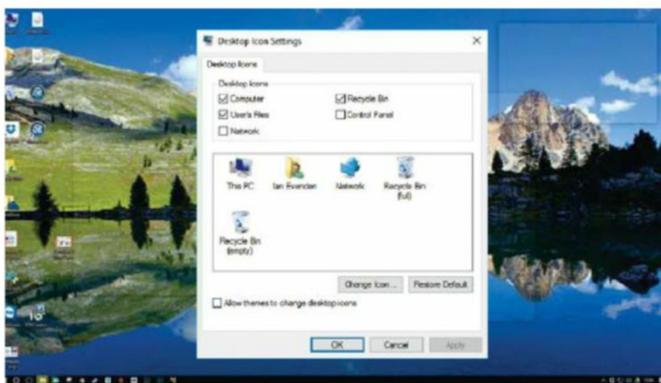
you'll be taken to a scre

a new one, or even more

open on each.

Windows from using a M

over instead of the one

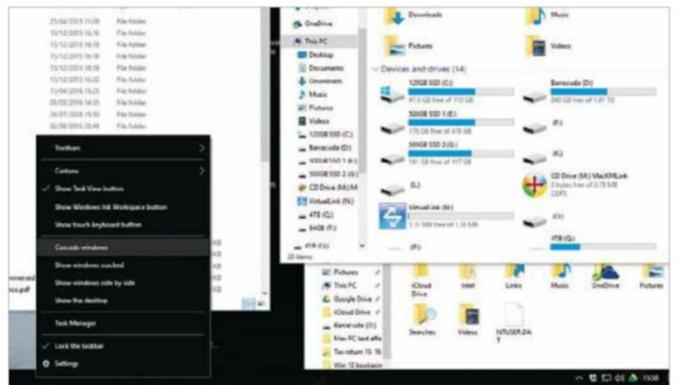
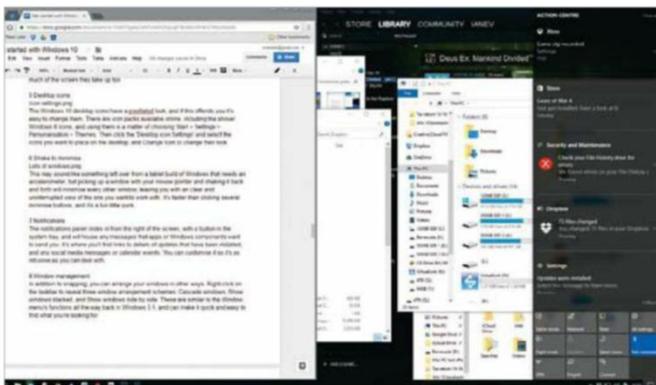


### 5 Desktop icons

The Windows 10 desktop icons have a pixellated look, and if this offends you it's easy to change them. Luckily, there are icon packs available online – including the shinier Windows 8 icons. Download the icon pack you want to use, then go to Start > Settings > Personalisation > Themes. Click the 'Desktop icon Settings' and select the icons you want to place on the desktop, then use the Change Icon option to change their look.

### 6 Shake to minimise

This may sound like something left over from a tablet build of Windows that needs a built-in accelerometer, but picking up a window with your mouse pointer and shaking it back and forth will minimise every other window, leaving you with a clear and uninterrupted view of the one you want to work with. It's much faster than clicking several minimise buttons, and it's a fun little quirk that's a good one to remember.



### 7 Notifications

The notifications panel – or Action Centre – slides in from the right of the screen, with a button in the system tray, and will house any messages that apps or Windows components want to send you. It's where you'll find links to details of Windows updates that have been installed on your machine, and any social media messages or upcoming calendar events. You can customise it so it's as intrusive as you can deal with.

### 8 Window management

In addition to window snapping, you can arrange your windows in some other ways too. Right-click on the taskbar to reveal three window arrangement schemes: 'Cascade windows'; 'Show windows stacked'; and 'Show windows side by side'. These are similar to the Window menu's functions that have been available all the way back to Windows 3.1, and can make it quick and easy to find what you're looking for.

# Customise the Start menu

The Start menu in Windows 10 is more powerful than ever – here are some easy tips to make it work for you

**T**he Start menu's return was big news when Windows 10 launched, and it has evolved as the operating system has been updated. It's become a fast, and efficient way to access apps and settings – Windows 8's full-screen monstrosity is now a distant memory, thankfully!

However, if you don't like how the Start menu looks when you first pop it up on your fresh

install of Windows 10, it doesn't have to stay that way. It's fully customisable in ways that were never possible in earlier versions of the operating system, and can be made to work in just about any way you want, standing out from its background for ease of reading, or automatically blending in with the colour scheme of whatever theme you have currently set on your desktop.



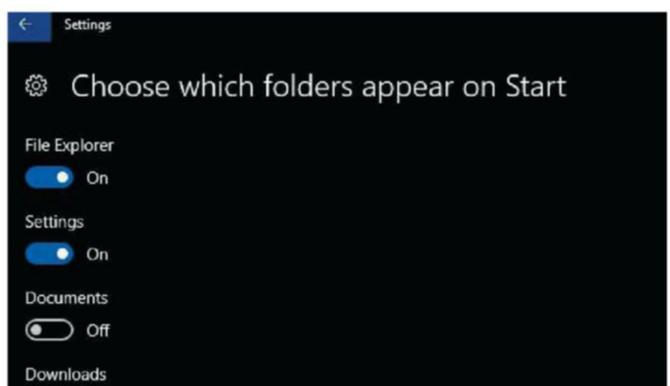
**1 Colour**  
Your Start menu's background can be any colour you like – all you have to do is untick a box. Open up Settings, then Personalisation and finally Colours. Untick the 'Automatically pick an accent colour from my background' option and you'll be able to pick a colour from the palette. So your Start menu can be a contrasting red or yellow rather than a dull blue or grey. Play around to find a combination that works for you.



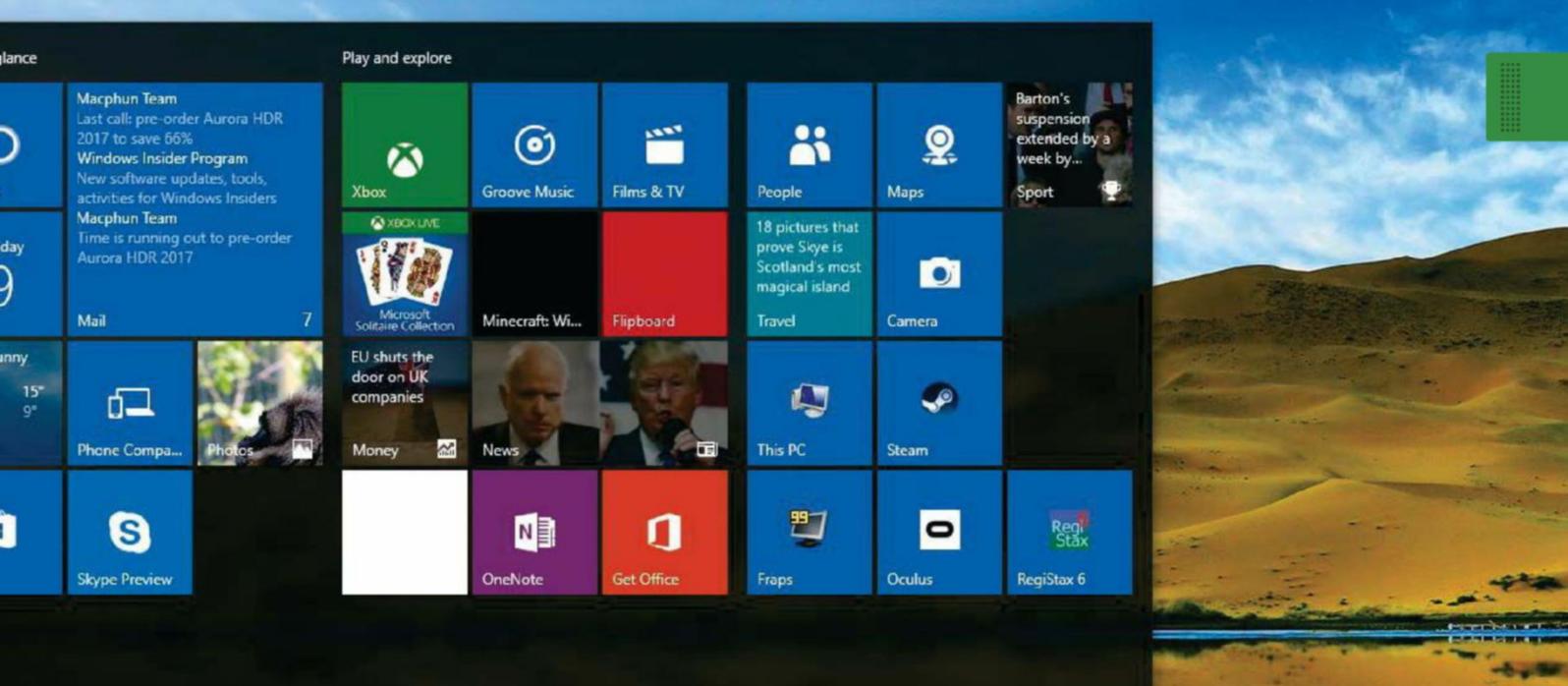
**2 Size**  
To make space for all the customising you can do to the Start menu, you can easily resize it to your liking. Just move your mouse pointer to the top-border or right-border of the Start Menu, the pointer will change into arrows, and you'll be able to increase or decrease height and width, dragging it out to completely fill the screen if you want to. This is particularly useful if you have a PC filled with programs that you access regularly.



**3 Folders and tiles**  
Your Start menu is made up of lists and tiles, and some of these can be shortcuts to folders such as Documents. Settings > Personalisation > Start enables you to tinker with this, so if you never shoot videos you can stop the empty Videos folder from taking up space on the menu. You can turn the links to the Settings window, and the one that opens an empty File Explorer window, on and off too.



**4 Hide program lists**  
By default, the Start menu will show you lists of both your most used programs and the most recently opened ones. This can end up repeating itself, so if you want to get rid of one or the other of the lists, or both, open up Settings > Personalisation > Start, from where you'll be able to toggle the lists on or off. You can also prevent apps from appearing on the lists so you only get a view of the things you really need from day to day.



**5 Use it to search with**  
 Hitting the [Win] key on your keyboard to pop up the Start menu's Search box is one of the fastest ways to look for anything in Windows 10. Just type a few characters and you will get suggestions for applications and documents stored on your computer that match your initial query. You can also use the arrow keys on your keyboard to navigate the Start menu, if you'd rather not use the mouse.

**6 Live tiles**  
 Live tiles are tiles that are constantly updated with data, usually gleaned over the internet to make them up-to-date. There's one for the Mail app that shows your most recent messages, one for the Weather app that uses your PC's location to tell you what's going on outside the window, and so on. If you find them distracting, you can turn them off by right-clicking them and choosing the appropriate option.



**7 Pin tiles and shortcuts**  
 If there's something you need to be able to find quickly, but which gets lost in the lists of the Start menu, you can pin and reposition it so it's always prominently placed. To do that right-click an item and choose 'Pin to Start'. It will now appear in tiles. Now click and drag the tile to where to want to move it to. To resize the tile, right-click, choose Resize then the tile size you want. You can pin shortcuts to the Taskbar for easy access too.

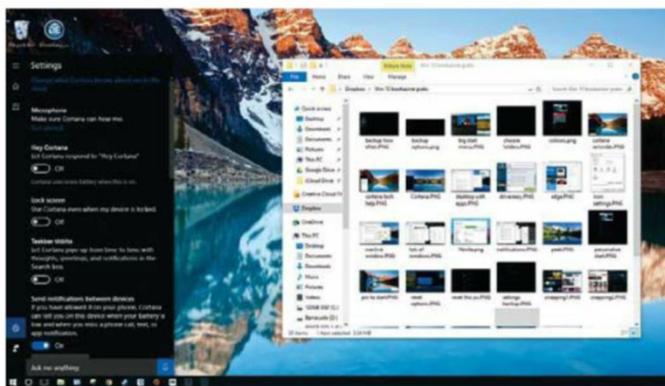
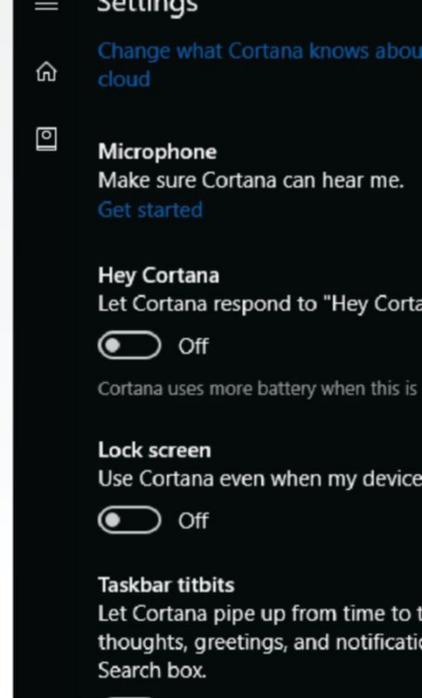
**8 Bring back the Start screen!**  
 It may have been almost universally mocked and reviled in Windows 8, but the fullscreen Start menu is still there in Windows 10, ready to block out all your work at a single press of the Windows key! But, if you liked it, go to Settings > Personalisation > Start and tick the box marked 'Use full-screen Start when in the desktop'. Note that wording: it now won't actually cover up your apps like it did in Windows 8.

# Get to know Cortana

Meet the digital assistant that's here to help you – she can even recognise the sound of your voice

**M**icrosoft's virtual personal assistant takes its name from a character in the *Halo* series of videogames. That incarnation of Cortana – an AI who is outwardly female (having been created from the brain patterns of a female scientist) and never seems to have been provided with quite enough clothes – can hack alien computer encryption and fly captured spaceships.

The Windows 10 version is perhaps a little less powerful, but comes in useful all the same. She can search using natural language terms, and by using voice activation just like Siri does on your iPhone. And if the idea of voice controlling your PC alarms you, or perhaps your computer isn't equipped with a mic, then you can still interact with Cortana through the keyboard, typing your queries for Cortana to answer.

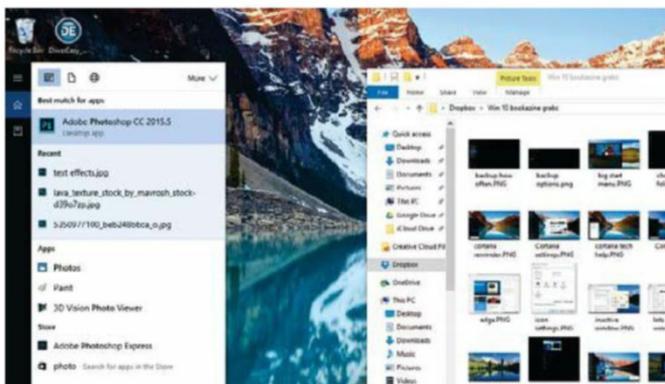


## 1 Set up

Depending on how your PC has been configured, you may need to switch Cortana on in order to work with her. The first time you try to search your PC, she'll ask if you want to use her. Say no, and the search box remains functional, but without the extra features that Cortana brings. You'll need to be connected to the internet to use Cortana of course, because that's how results are queried and returned to you, just like Apple's Siri.

## 2 Personalise Cortana

To make Cortana as useful as possible she needs to address you personally. Tell Cortana your name and where you live and she can adapt herself to you. If you've opted for her to speak results back to you, she'll call you by name and allow you to correct her pronunciation if she gets it wrong. Tell her your interests, and appropriate news snippets will appear when you open Cortana's panel. You can do all this from the settings.



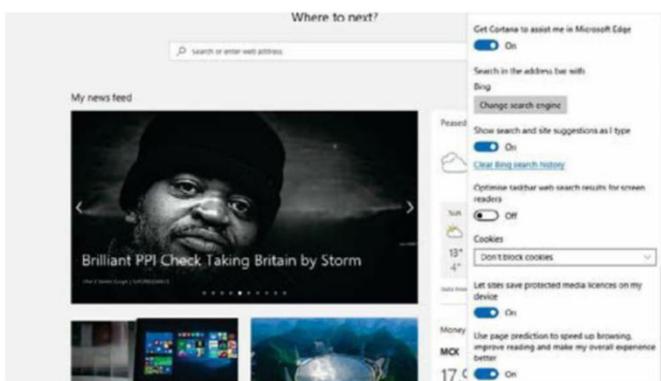
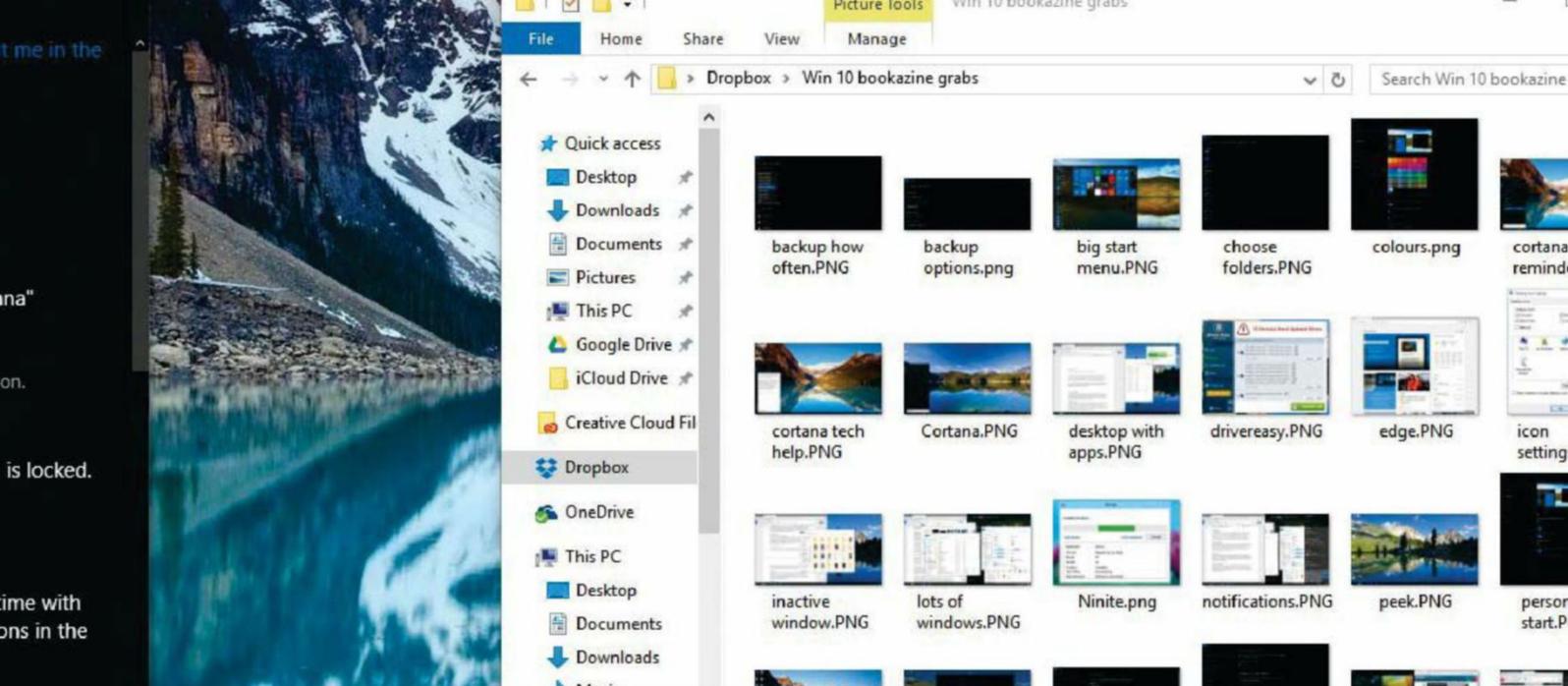
## 3 Narrow down your search

To stop Cortana searching things she doesn't need to, and speed up the return of those internet results, you can tell her exactly what you're looking for, which is great when it comes to finding apps and files in particular. So if it's definitely an app you need, rather than a picture or video, start your search query with 'app:'. If it's a setting, type 'setting:'. For a document... you get the idea. You can force a web search with 'web:' too.



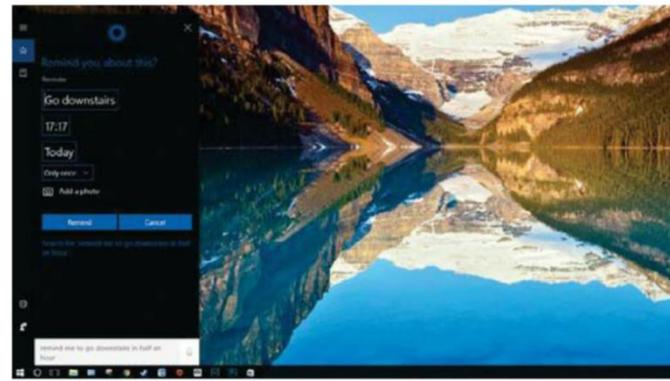
## 4 Use Cortana for tech support

If there's something you want to know how to do in Windows 10, a publication like this one can help of course. If you need to know really quickly, try asking Cortana instead. Type your query in, and it will appear in the list of results under 'Can I help?'. Clicking this gets you the Microsoft help files, and in the case of many common tasks a walkthrough will show you how it's done. Don't forget the tips on these pages though!



**5 Use Cortana in Edge**  
 Cortana can also help you as you browse the internet. To enable it in Microsoft Edge, go to Settings > Advanced Settings > View Advanced Settings and under 'Privacy and Services' enable 'Have Cortana Assist Me in Microsoft Edge'. Now, as you explore the web, you'll get helpful additions such as song lyrics if you're listening to music, or links to apps if the site you're using has one.

**6 Use voice commands**  
 Click the microphone icon next to the search box, and you can speak your questions and instructions to Cortana. You must have 'Search online' enabled in Cortana settings to use voice search, otherwise the mic icon disappears. If you select the option, she will respond to a cheery 'Hey Cortana' – but this will increase battery usage on portable devices, so is only worth turning on if you're sure you'll use it.



**7 Train Cortana to only reply to you**  
 It's hilarious to shout 'Xbox off!' at someone else's Xbox with Kinect voice control switched on, shutting the box down in the middle of what its poor user was doing, so train Cortana to respond only to your voice by selecting the 'Learn my voice' option in Settings and speak the test phrases. You'll find that Cortana keeps learning anyway, so over time the more you use Cortana the better she will be at just about any task!

**8 Use natural language to search**  
 If you want to set yourself a reminder, you don't need to find a calendar app and input what you want to do, and when, just type or speak it into Cortana as you would when talking to someone. Saying 'Remind me to take a screen break in an hour' or 'Remind me to buy flowers on the way home', for example, will trigger a notification at the appropriate time. Now there's no excuse to forget that meeting or important date again!





# Upgrade

▶ NEW HARDWARE ▶ ESSENTIAL ACCESSORIES ▶ LATEST GADGETS

## Welcome



Pop-ups pop up everywhere on the internet these days – and they can really ruin your enjoyment of your favourite websites.

Some web browsers do include pop-up blocking options, but these don't always work that well. So this month, we're looking at four brilliant tools that will do the job better and for free. You can find out more on page 95. We also take a look at Lenovo's Surface Pro alternative, the Miix 510 (page 84); the brilliantly affordable Chuwi LapBook (page 86) and cast our eyes over AOC's lovely Porsche Design display (page 88).

**Nick Odantzis** Deputy Editor  
windowsmagazine@futurenet.com

## This issue's highlights



### 84 Lenovo Miix 510

Looking for an alternative to the Surface Pro? Then try this 2-in-1 tablet hybrid...



### 86 Chuwi LapBook 12.3

Smart design and low pricing make this Chinese laptop one of the best we've seen



### 88 AOC PDS241 Porsche Design

This 23.8-inch monitor looks great on any desk, but is there more to it than that?



### 95 Best free pop-up blockers

Banish adverts and other annoyances with our pick of the four best apps

## Our promise to you...

The Upgrade section is your key to finding out about the latest products, all designed to help you get more from your PC

### You can trust our reviews

Our reviewers are 100 per cent independent, with years of experience in the world of computing. Our rigorous testing procedures mean that only genuine, high-quality products are awarded high star ratings. If you see an item of hardware bearing a high score, you can be confident that it is an excellent product.

### We choose the best products

Thousands of new PC products are released every year and choosing between them can be an impossible task. Our experts select only the best hardware and software to feature in this magazine. Even better, our star rating system makes it simple to find the best products, giving you a fast, trustworthy guide.

### How we review

Our expert reviewers guarantee to test every piece of hardware rigorously and thoroughly, using only acknowledged experts to establish the worth of a product. We always review from the viewpoint of our readers; the day-to-day practicality and quality of a product is paramount.

**RATING EXPLAINED** ★★★★★ Superb ★★★★★ Very good ★★★★★ Good ★★★★★ Disappointing ★★★★★ Poor



## Lenovo Miix 510

£849 | \$669 [www3.lenovo.com](http://www3.lenovo.com)

Can Lenovo's latest take the fight to Microsoft's Surface Pro 4?

The 2-in-1 tablet hybrid is no longer a novelty. The market is flooded with devices with detachable keyboards that offer up Windows 10's capabilities as a tablet and desktop OS, including Microsoft's own Surface range.

While the new Surface Pro is Microsoft's latest, the Miix 510 is more akin to the Surface Pro 4 or Acer's Switch Alpha 12.

The Miix 510 is equipped with a latest-gen Kaby Lake version of the Intel Core i5 and a strong central pairing of 8GB of RAM and a 256GB SSD. There are cheaper variants, but this is the one to go for in our book.

The Miix design language centres around two watchband-style hinges that give you more control and flexibility than the Microsoft Surface when it comes to the angle of the kickstand and therefore the screen. Another plus is that the keyboard cover is included with the device – unless you nab a deal you don't get that with the Surface Pro.

Like previous models, the Miix 510 comes with an active pen. Pens have more functionality these days thanks to the new Windows Ink feature in Windows 10, and they're an essential add-on for any tablet that takes itself seriously. Lenovo's stylus doesn't attach to the device via a magnet, although there is a pen loop on the included slipcase.

### Price and availability

There's an Intel Core i3 variant of the Miix 510 for £750 (\$599), which has half the amount of memory and storage as well. The Core i3 version will be fine for most basic tasks, but if you're looking at any kind of photo or video editing we'd recommend the Core i5. At the time of writing, you're looking at £849 (\$669) for this device.

The Surface Pro 4 has come down in price, but for a model with similar spec to the Miix 510 you can expect to pay around £899 (\$729), a significant premium, especially

when you factor in the cost of the Type Cover keyboard as well.

Depending on where you look, the Acer Switch Alpha 12 is around the same price, with Acer recently announcing a new version.

### Design

The Miix 510 is a well-designed tablet hybrid. That's not to say it's a stunner, but it does look distinctive and those watchband-style hinges give it a certain something. The detachable keyboard with optional backlight also doubles up as a protective faux leather folio case, which works well and is good to grip hold of. It's a more premium-feeling affair than Microsoft's Surface Pro 4 Type Cover – and you get Lenovo's version for free.

The side controls – especially the power button – are a little plasticky, but it's a minor complaint.

Without the keyboard cover, the Miix 510 weighs just shy of 900g. That's OK to hold in one hand,

## KEY FEATURES

### Lenovo Miix 510

**Supplier** [www3.lenovo.com/](http://www3.lenovo.com/)  
**Processor** 2.7GHz Intel Core i5-7200U  
**Graphics** Intel HD 620  
**Memory** 8GB  
**Storage** 256GB PCIe SSD  
**Display** 12.2-inch IPS, 1,920x1,080 pixels  
**Connectivity** 802.11ac Wi-Fi; Bluetooth 4.0; 1x USB 3.0 Type-C; 1x USB 3.0; 1x audio combo jack  
**Weight** 1.25 kg  
**Dimensions:** 300x99x205mm



leaving the other free to draw or write on the display. However, this means you're going to want to brace it against something or put it on a flat surface before too long.

The keyboard cover sports Lenovo's AccuType-style keys, which are slightly curved along the bottom edge. They're sufficient in size but don't possess as much travel as the Surface Pro 4 cover, and this doesn't make for a great experience when you have a lot of words to type. The biggest problem is that the keyboard flexes

use, it's not a problem using Full HD on the Miix 510. It depends on how determined you are to have best-in-class specs.

### Performance

Because we're looking at the Intel Core i5 variant of the Miix 510 here, performance isn't an issue. There's plenty of 'everyday' power on offer.

Naturally, you're not talking about gaming performance, but between the fast PCIe SSD and the processor, there was no issue with any kind of everyday tasks we tried.

## "Because we're looking at the Intel Core i5 variant of the Miix 500 here, performance isn't an issue"

a bit. And if you're a hard typist in any way, the keyboard bounces rather angrily.

Elsewhere, the bezels around the display seem wide, but they're not too much and they don't make the device look chunky in any way. Quite the opposite, the tablet looks sleek and professional. Naturally, you'd expect this for a device with a price in this ballpark.

### Display

There's a lot to like about the display here – blacks are black and colours are vibrant. Viewing angles are excellent. What is a bit more of a problem is the resolution, which sticks with Full HD, whereas the Surface Pro 4 and Acer Switch 12 feature 2,160 x 1,440 resolutions. In

Plus there's plenty to like in terms of entertainment performance and the Miix 510 is great for watching movies on with the kickstand.

Talking of the kickstand, it's an effective bit of industrial design from Lenovo. The ability to poise the device at almost any angle is a boon. Elsewhere, the edges of the device are covered by the usual fan and speaker grilles plus ports, but everything is integrated nicely, with power, USB-C and USB 3.0 on one side and power, volume and a headphone jack on the other.

Writing detection is responsive enough to jot down notes swiftly, and the pen is slim enough to use for long periods.

In our benchmark tests, the Miix 510 was, well mixed. It scored a

credible 6570 in our GeekBench multi-core test, but battery life was sub-standard compared to rivals, lasting four hours and 40 minutes during our looped video test, 35 minutes shorter than the Surface Pro 4. The Miix 510 lasted two hours 57 minutes on the harsh PCMark 8 battery test. The Surface Pro 4 managed 18 minutes more.

It's great to see USB-C included, but we'd have preferred a USB-C charger rather than the round-ended charger we get here. Since Microsoft is still ignoring USB-C, this is a definite plus for the Miix over the Surface.

Lenovo hasn't included a microSD port, which is surprising but not a deal-breaker. As you'd expect, you get a 2MP front camera for video calling, as well as a 5MP unit on the back.

Dual-microphones cancel out background noise and we had no problem being understood on calls.

In terms of audio playback, it's fine for everyday viewing, but you'll want to hook it up to a Bluetooth audio system (there is a headphone jack, too) for movies or music.

### Summary

So despite a compelling spec sheet and generally likeable appearance, the Miix 510 remains hard to unequivocally recommend.

That's because of the rivals that loom above and beside it, not least the Surface Pro 4. It's the battery life that really lets it down.

But if it's price that's your main motivator, you'll find the Miix 510 a fantastic alternative choice. ■

**A great-value tablet, as long as you don't mind its Full HD screen and rather limited battery life.**





## Chuwi LapBook 12.3

£239 | \$312 <http://en.chuwi.com>

Here's a Chinese brand that's not struggling to innovate

**C**huwi is one Chinese PC manufacturer that hasn't been short on product releases over the past 12 months despite being a relative newcomer outside of mainland China.

Available online from GearBest ([www.gearbest.com](http://www.gearbest.com)), the LapBook 12.3 is the latest addition to this range and positions itself as a 'souped-down' laptop equivalent of the Microsoft Surface Pro 4. In other words, if the Surface Pro 4 had a laptop equivalent, the LapBook 12.3 would have been its direct competitor – and no, we're not counting the Surface Laptop as such a device.

### Design

In many respects, comparing the LapBook 12.3 with the Surface Pro 4 is a distraction. A better way to think of this device is: if the iPad Pro and MacBook Air had a lovechild, it's likely that it would look like the LapBook 12.3. There are very clear

design cues that point to some serious aesthetic inspiration from Apple's range of products – but then Apple's legendary CEO, Steve Jobs, once said that the company had "always been shameless about stealing great ideas."

Given the black rim surrounding the screen and the thick bezel, the wedge profile, all-metal chassis and the 'mono-hinge' along with a brushed aluminium finish, it's not surprising that many people's initial thought will be that it's an 'Apple' when glancing at this notebook for the first time.

Like the iPad Pro and the Surface Pro 4, the LapBook 12.3 has a display with a 3:2 aspect ratio and like the latter, it is a 12.3-inch model with a 2,736 x 1,824 resolution. That's almost five million pixels, more than twice what you'd expect from a pair of Full HD monitors.

That's also a higher pixel density than either the iPad Pro or Apple MacBook Pro Retina Display have.

This is a rather large laptop at 293x200x15mm with a weight of just under 1.4kg. A major element that contributes to the big footprint of the LapBook 12.3 is the wide bezel around the display – tablet and laptop vendors use these because they come in handy for holding your device in touch mode.

But this laptop isn't touch-capable and the matte finish only serves to underline this point, so all in all, this is a rather confusing move by Chuwi here.

Elsewhere, the notebook packs one USB 3.0 and one USB 2.0 port, an HDMI connector (that can support 4K at 60Hz), a TF Card (aka microSD) slot, a 3.5mm headphone socket and a proprietary power port which connects to a 24W (12V, 2A) brick-style power supply unit.

Flip the machine over and you will discover a flap that hides an empty slot where you can plug in an M.2-sized SSD (not included in the price), plus there are two

## KEY FEATURES

### Chuwi LapBook 12.3

**Supplier** www.gearbest.com

**Operating system** Windows 10

**Processor** 1.1GHz quad-core Intel Celeron N3450 (Apollo Lake)

**Graphics** Intel Graphics HD 500

**Memory** 6GB

**Storage** 64GB eMMC flash

**Display** 12.3-inch IPS, 2,736x1,824 pixels

**Connectivity** 802.11ac Wi-Fi; Bluetooth 4.0; TF Card Slot (aka microSD); M.2 SSD expansion slot; 1x Micro HDMI; 1x USB 3.0; 1x USB 2.0; 1x 3.5mm headphone jack

**Battery** Up six hours between recharges

**Dimensions** 293x200x15mm



speaker grilles and four rubber feet on the underside.

### Specifications

Inside the LapBook 12.3 is the increasingly popular Intel Celeron N3450, a 14nm member of the Apollo Lake family, which is a quad-core (four-thread) processor with a 1.1GHz base frequency bursting to 2.2GHz. It has a Thermal Design Power (TDP) of 6W and a 2MB cache, along with integrated Intel HD Graphics 500 clocked at 200MHz, bursting to 700MHz.

### “This laptop is a bargain, especially with its storming 2,736 x 1,824 resolution display”

Backing that up is 6GB of system RAM, probably in a 4GB plus 2GB setup, designed to make the most of the dual-channel memory support of the Celeron N3450. Note that the CPU supports up to 8GB of RAM so in theory, assuming that none of the memory modules are soldered in and the memory slots are accessible, you should be able to swap them if you wish.

As expected, the storage subsystem consists of 64GB of eMMC memory – Toshiba 064G93, a popular model among Chinese brands – which is one way that vendors cut down on costs.

### Performance

The magnesium aluminium alloy of the chassis gives a premium air to

this laptop and yes, it does feel like a MacBook; at least to the touch. The display is gorgeous, and it’s probably one of the best we’ve ever seen on an entry-level laptop.

There’s hardly any flex on the keyboard and touch typing is an enjoyable experience with great feedback and 1.5mm of key travel. Ditto for the touchpad; it’s more than decent in terms of size, sensitivity and precision.

Opting for a 3:2 aspect ratio for the display ensures that the palm rests are bigger than average,

which is great news for those who spend hours typing on a laptop.

Don’t expect miracles when it comes to performance though. Most of the LapBook’s benchmark numbers are noticeably lower than the competition – the Teclast X3 Plus, Chuwi Hi13 or the Onda Xiaoma 31 – despite using the same Intel Celeron processor and an equal amount of memory.

Two potential explanations for this are that the much higher screen resolution is taxing the on-board GPU far more, and that the processor is being throttled during the benchmarks as it’s overheating. The LapBook 12.3 did feel quite warm during our tests.

Another disappointment is just the battery life, which stands at just

under three hours 30 minutes, due partly to a low-capacity battery (36.33Whr). Our test involves playing a YouTube video of a count-up timer with brightness set to 100% and all other settings left untouched except for power saving (we selected ‘never shut down’, ‘screen never go dark’). As ever, your mileage may vary when it comes to battery longevity.

### Summary

We’ve ended on talking about the downsides of the Chuwi LapBook 12.3 here, but let’s be clear – the battery life and the performance are two sore points in an otherwise near-perfect picture. If you can live with these then this notebook is a bargain, especially with its storming 2,736 x 1,824 resolution display.

Its finish comes close to far more expensive top-end laptops and its component list – although not perfect – exceeds what you would get from a similarly priced device in the UK. But clearly, the LapBook’s 12.3 screen is the showstopper and the main reason why you’d want to buy this machine.

The Chuwi LapBook 12.3 is a definite upgrade from the LapBook 14.1, and should Chuwi solve the two outstanding problems we’ve highlighted, it will have a sure-fire winner on its hands. The Jumper EZBook 3 Pro or the Yepo N737A, both of which we’ve yet to review, are the closest rivals in terms of specifications, but still can’t offer the same 5-megapixel display. ■

**Chuwi’s LapBook 12.3 is a hell of a lot of laptop for your money, with a showstopper of a display.**

 **Windows**  
Help & Advice  
Verdict





## AOC PDS241 Porsche Design

£189 | \$240 [www.aoc.com/](http://www.aoc.com/)

Is this 23.8-inch monitor all style and no substance?

The AOC PDS241 Porsche Design aims to challenge the notion that monitors need to be simple and boring-looking rectangles, and persuade us that they can in fact be beautiful accompaniments to our PCs that anyone would be happy to have displayed on their desk.

As the name suggests, AOC has teamed up with famous design house Studio F. A. Porsche, best known for bringing contemporary and stylish designs to watches – and, of course, cars.

However, while the design is certainly exciting, on paper the specifications of the AOC PDS241 Porsche Design are rather less so, with a standard 1080p Full HD IPS screen with 60Hz refresh rate and a rather conservative screen size of 23.8 inches (there's also a 27-inch version – the AOC PDS271).

This isn't a monitor designed to dominate the desk then, nor will it really appeal to gamers who

demand high refresh rates and even higher resolutions.

So, a non-flashy monitor that's designed by one of the world's most respected design houses? It sounds like the AOC PDS241 Porsche Design could be suffering from a bit of an identity crisis.

However, while the design is certainly premium the price is far from it, at a very reasonable £189 (around \$240). And that tempting price goes some way towards making up for a lack of features.

### Design

One area in which the AOC PDS241 Porsche Design has almost no peers is its design – this is a seriously attractive bit of kit that will improve the aesthetics of pretty much any desk you put it on.

The incredibly thin bezels (AOC describes it as a 'frameless' design, and while it's not quite there, it's close), and slim 5.2mm depth gives the AOC PDS241 a minimalist look.

The bottom bezel is thicker, with a silver design, and hosts the AOC logo (also printed on the back). Nowhere on the body will you find the name of Studio F. A. Porsche, but it does appear when you turn on the monitor.

The AOC PDS241 Porsche Design isn't uniformly thin, as the lower third of the body becomes slightly thicker to accommodate the electronics. However, overall this is an impressively thin monitor – which also makes it light. While you probably won't be carrying it around much, this lightness is appreciated when you first set up the AOC PDS241 on your desk.

To make the body of the monitor as thin as possible, the AOC PDS241 Porsche Design has a bulky breakout box that includes the both the power port and a full size HDMI port. This box connects to the monitor via a micro HDMI cable which provides both power and video signal.

## KEY FEATURES

### AOC PDS241

**Supplier** [www.aoc.com/](http://www.aoc.com/)  
**Screen size** 23.8"  
**Aspect ratio** 16:9  
**Brightness** 250 nits cd/m2  
**Contrast Ratio** 1000:1  
**Viewing Angle** 178-degrees  
**Response time** 4ms  
**Display resolution** 1,920x1,080 (Full HD)  
**Connectivity** 1x HDMI  
**Weight** 3.15kg  
**Dimensions** 541.1x416x178.5mm



While the box is quite large, it has the same silver design as the rest of the monitor, so it doesn't look too bad – plus it's pretty easy to hide out of sight, which is presumably a feature of the design.

While the emphasis on design had produced a lovely-looking monitor, it comes at the cost of features, with the AOC PDS241 only including a single HDMI port. There are also no built-in speakers; instead there's a headphone jack you can plug external speakers (or, of course, headphones) into.

**“The image quality is superb, with colours looking vibrant in our tests. Contrast is also very good”**

A single button located on the underside of the monitor's body is used to bring up and navigate the on-screen display menu. However, this simplicity makes navigating the OSD menu rather clumsy at times.

The stand continues the brushed metal theme of the monitor, with a simple yet elegant curved design. The micro HDMI port connects to the monitor at the tip of the stand.

So, if you're happy with just a single HDMI port, and value aesthetics over all else, then you'll be very happy with the AOC PDS241 Porsche Design.

### Performance

As we've mentioned, the OSD menu for tweaking the settings of the AOC PDS241 Porsche Design is

controlled by a single button. You press this once to bring up the menu, then press it repeatedly to navigate through the options. To select an option, you stop pushing the button for a few seconds.

This isn't ideal; we appreciate that AOC wants to keep buttons to a minimum, but using the menu quickly becomes a chore when you need to tweak the settings.

For example, if you want to increase the brightness you press the button a number of times to select the option for adjusting the

brightness, then you need to continue to press the button to increase the brightness.

The issue here is the adjustment only goes one way. The brightness is set to 50 by default, so if you want to set it below that you have to keep pressing the button to go past 100, then start from 0 and keep pressing until you reach 50. Not ideal. The good news is that out of the box the AOC PDS241 Porsche Design's image quality is very good, so hopefully tweaking can be kept to a minimum.

Without adjusting the settings of the AOC PDS241 the image quality is superb, with colours looking vibrant in our tests. Contrast is also very good, with deep blacks in dark scenes, and the anti-glare coating

of the screen ensures images look great even in bright environments, and from various viewing angles.

1080p Full HD videos look very good; however the results aren't impressive when playing games. With its 60Hz refresh rate and 4ms response time, this is clearly not a monitor designed for gaming – and that shows, with blurred visuals during fast-paced scenes.

If you're using this monitor for general work, and occasionally watching movies, then the image quality will be perfectly acceptable. If you require complete colour accuracy – if you're editing video or photos, for example – then you'll need to splash out on a more expensive monitor, since the AOC PDS241 doesn't reproduce colours to a professional standard.

### Summary

The AOC PDS241 Porsche Design is a gorgeously-designed monitor that would brighten up any desk. Thankfully, the monitor continues to impress after you've turned it on, with very good image quality.

However, the AOC PDS241 isn't as configurable as other monitors, which means that if you rely on colour accuracy and image quality for creative work, this isn't the monitor for you.

The design also means ports are limited to just one HDMI and a headphone jack – and gamers in particular should steer clear.

But if you want a simple, effective, and nicely-designed monitor that's also affordable, you've come to the right place. ■

**If you're looking for a stunningly-designed monitor at a fantastic price you can't go wrong with this.**





## JBL Playlist

£149.99 | \$149.95 [www.jbl.com](http://www.jbl.com)

The budget Bluetooth behemoth enters the multi-room space

**J**BL is a company that has an exhausting number of Bluetooth speakers on the market, and these bright and colorful rugged speakers have become outdoor music staples.

But the JBL Playlist is something a little different. Instead of being a portable battery-powered speaker, this is one meant for the home that you're going to need to keep plugged in at all times.

The reason for this change is that this isn't a Bluetooth-only speaker. Instead the JBL Playlist is equipped with a couple of different Wi-Fi streaming technologies – namely, Google Cast and Spotify Connect – that make it more similar to a Sonos-style multi-room setup.

For the most part this functionality is well implemented, resulting in a speaker that's hugely versatile. By integrating into these well-established ecosystems, JBL has ensured that you get all the functionality you'd expect from a

multi-room system without the company having to build its own dedicated app and services.

The only potential downside is that the Playlist still absolutely has JBL's signature sound which, while at home in a rugged, outdoor Bluetooth speaker, might feel out of place in a domestic situation.

### Design and features

Available in black or white, the JBL Playlist is a fun-looking speaker that's all bold curves and mesh.

Aside from a small JBL logo and Wi-Fi connectivity light, the front of the speaker is otherwise one large speaker grille. Along the top there are a couple of control buttons. From left to right there's an on/off button, volume down, play/pause, volume up, and a button to put the speaker into Bluetooth mode.

Yes, in addition to supporting streaming over your home internet connection, the JBL Playlist can also be streamed to via Bluetooth,

which is helpful if your home network is being slow or unreliable.

Direct controls on the speaker are also helpful. Depending on the speed of your home network there can sometimes be a delay when you want to turn the speaker's volume up or down – directly controlling the speaker removes this problem.

Around the back of the speaker you also have a 3.5mm input (just in case you want to opt for a wired connection for any reason) and a two-pin power connector that accepts the speaker's annoyingly short power cable.

If you have ever set up a Google Chromecast before then the setup process for the JBL Playlist shouldn't be too unfamiliar. Simply download the Google companion app, Google Home, and it will guide you through the steps needed to connect to the speaker and subsequently get it connected to your home's Wi-Fi.



## KEY FEATURES

### JBL Playlist

**Supplier** www.jbl.com  
**Drive units** 2x 57mm woofers  
**Power (RMS)** 2x 15W  
**Frequency response** 60Hz-20kHz (-6dB)  
**Signal to noise ratio** >80dB  
**Connectivity** 802.11ac Wi-Fi; Bluetooth 4.2; 3.5mm analogue audio input  
**Power consumption (sleep mode)** <2W  
**Weight** 1120g  
**Dimensions** 316x147x131mm



If you want to sync up the speaker with other Google Cast-equipped speakers then the setup is a little more involved, but it's still handled by the same app.

We got the JBL Playlist paired with a Chromecast Audio to allow the same music to be played across two different rooms, and the two streams synced perfectly.

It might seem strange to include support for both Google Cast and Spotify Connect. After all, both are accessed in the same way in the Spotify app where you select the

worse – it shares the same DNA that's made the company's Bluetooth speakers so popular.

In short, that means a bass response that's thick and chunky, with mids and trebles taking a backseat to a certain extent.

It seems only fitting to start off our listening session with some energetic pop punk from The Offspring. The driving offbeat drumbeat in *You're Gonna Go Far, Kid* has power aplenty, with the Playlist providing a really energetic listening experience.

## “It's simply much easier to control Spotify with a keyboard and mouse rather than using a phone”

JBL Playlist from the bottom of the Now Playing screen. Plus, Google Cast does more or less everything Spotify Connect does, but with support for many more apps including Tidal and Deezer.

However, Spotify Connect also has its own functionality whereby you can use Spotify players on a desktop or laptop to control the speaker – something which isn't available using Google Cast. We found this especially useful when listening to music while working; it's simply much easier to control Spotify with a keyboard and mouse rather than using a phone.

### Performance

This is a JBL speaker through and through, and so – for better or for

It's a similar story if you switch to *From Her Lips to God's Ears (The Energiser)* by Against Me! where the song's frantic pacing is delivered in spades by the speaker.

When a JBL representative described this as a speaker that's meant for parties, we can see exactly where they're coming from.

But the JBL Playlist is a lot less sure of itself when it comes to more laidback tracks like *I Fall In Love Too Easily* by Chet Baker or *It Was A Very Good Year* by Frank Sinatra, where you'll find the mids and trebles getting lost in the mix a little, not to mention not having quite the same level of detail.

This isn't a speaker that responds well to being put in a corner and used for background music. It

wants to be front and centre in a party environment.

If you're looking for a more laidback listen, then the slightly more expensive Sonos Play:1 might be more up your alley.

Our only other issue with the speaker is that the stability of the audio playback varies depending on the quality of your home's Wi-Fi signal. On a couple of occasions during our test, the speaker got kicked off our network, forcing us to restart it to resume playback.

This might not be a problem if you have a more robust network, and it's also worth noting that switching to a Bluetooth connection will remove your home network from the equation.

Nevertheless, it's a problem that rarely affects a Chromecast Audio that we have connected to the same wireless network.

### Summary

If you like the punchy and energetic sound signature of JBL's existing Bluetooth speakers, then the Playlist offers exactly that in a home-listening form factor.

The connectivity options are what you need in this setting, and make it easy for everyone in your home to get their music playing no matter which streaming service or device they use.

But if you're looking for a speaker to sit discreetly in a corner and play ambient music then you might find the JBL Playlist a little too punchy for this purpose.

As a party speaker, though, it does its job with gusto. ■

**You can connect everything you need to this speaker, which has a real punch to its sound.**

Windows  
Help & Advice  
Verdict



# BLUETOOTH HEADPHONES

Don't let cables come between you and your favourite music. Liberate yourself with these Bluetooth wireless headphones and their sound-boosting aptX tech



## 1 Sony MDR-1000X

£360 [sony.co.uk](http://sony.co.uk)

Sony's top-end wireless cans are the most expensive on test, but they're also the smartest. They customise noise-cancelling to suit your wearing habits, while two Ambient Sound settings let in voices or background noise. It all works brilliantly. The synthetic leather styling is dull, but they're super comfy and easy to use thanks to the slick gesture control pad. Sony's high-res 40mm drivers deliver wonderfully rich and refined sound with no bright edges, picking out rarely noticed nuances and supplying deep, tightly controlled bass. The 20-hour battery life of these headphones is also impressive.



## 2 AKG N60NC Wireless

£250 [uk.akg.com](http://uk.akg.com)

Lighter and more compact than most noise-cancelling rivals, the N60s are perfect for travelling. They fold flat into a pocket-friendly size and offer 15 hours of Bluetooth aptX playback, or 30 hours with Active Noise Cancelling only. The metal housings and matt black finish are stylish, topped off by comfortable memory foam ear pads and intuitive controls. Superb noise-cancelling paves the way for some fabulous sound quality, which is powerful, well-balanced and detailed. Full-bodied mid-range and beefy bass result in a satisfying sound.



## 3 Marshall Monitor Bluetooth

£219 [marshallheadphones.com](http://marshallheadphones.com)

These Bluetooth aptX headphones mimic the look of Marshall's iconic guitar amps with a faux-leather finish, brass accents and curly wires. Build quality is excellent, and the compact over-ear pads offer decent isolation, but they squeeze the head too tightly for comfort. The 30-hour playback time beats pricier rivals, although there's no power-draining noise cancellation. In action, the Monitors fall short of audiophile status but deliver a well-balanced sound, with incisive treble and deep bass that never overpowers other sonic elements.



**O**ur good mate Pinocchio didn't like being tethered by wires and neither do we, particularly when listening to music while out and about.

Thankfully there's a wide range of wireless headphones to choose from,

which use Bluetooth technology to receive music from your mobile device or PC. With new smartphones such as the iPhone 7 dropping physical headphone outputs altogether, wireless cans like these are becoming more important than ever.

And if you're worried about sacrificing sound quality for the convenience of Bluetooth, don't be – all of the headphones on test support aptX, the audio codec that allows CD quality sound to be transmitted via Bluetooth. Let streaming commence...



## 4 Audio-Technica ATH-DSR7BT

£299, [eu.audio-technica.com](http://eu.audio-technica.com)

Audio-Technica aims to redefine wireless headphones with Pure Digital Drive, which keeps the signal in the digital domain from source to driver. The lack of a DAC means there's no 3.5mm jack; instead you get a USB port for high-res playback from a laptop, alongside Bluetooth 4.2 with aptX HD and 15 hours of playback. Build quality lives up to the price tag, with robust construction and head-caressing memory foam earpads. The sound is insightful and precise but a tad clinical – more punch and warmth in the bass department wouldn't go amiss.



## 5 Bang & Olufsen Play H7

£329, [beoplay.com](http://beoplay.com)

Chic and beautifully built, the H7s are a classic product from B&O. The soft lambskin over-ear cushions are secure yet easy to wear for long periods, while the inclusion of an aluminium touch-sensitive control panel makes operation easy on the go. The replaceable battery offers a respectable 20 hours of playback, but the lack of noise-cancelling is a pity at this price. Without it, the H7s muster a clear, detailed sound with sparkling treble and solid bass, but they could do with a bit more muscle to really make the music you play sing.



## 6 Bowers & Wilkins P7 Wireless

£319, [bowers-wilkins.co.uk](http://bowers-wilkins.co.uk)

Unearth the P7 Wireless headphones from the box and it's love at first sight thanks to their gorgeous design and premium construction. The stitched leather headband and durable metal hinges exude quality, while silky-soft memory foam earpads facilitate hours of comfortable listening. Good job too, as you'll get a decent 17 hours of Bluetooth aptX playback. Play some tunes and the performance is easily the best in test. Their refined, full-bodied, tight and powerful bass will reignite your passion for songs you've heard a thousand times.



**120 MOBILES TESTED & RATED**

APPLE IPHONE 7 | GOOGLE PIXEL & PIXEL XL | MOTO Z | SONY XZ

# MOBILE CHOICE

WHAT TO BUY AND HOW TO USE IT

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

## PHONES OF THE YEAR

OUR 2016  
*AWARD WINNERS*  
PLUS TODAY'S  
*HOTTEST ARRIVALS*



HUAWEI MATE 9



LENOVO MOTO Z



GOOGLE PIXEL XL



SAMSUNG GALAXY S7 EDGE



APPLE IPHONE 7 PLUS

THE  
UK'S **ONLY**  
**SMARTPHONE**  
& **TABLET**  
BUYING  
GUIDE

**BEST NETWORKS**

- TOP DEALS
- BEST CONTRACTS

**GIFT GUIDE**

- HOT TECH
- COOL GADGETS

**TOP GADGETS**

- CONNECTED HOME STARS



**BEST NOTE 7 ALTERNATIVES**

Pixel XL | iPhone 7 Plus | Mate 9

Future

ISSUE 216 WINTER 2016 £5.95



9 771365 496074

**THIS SEASON'S MUST-HAVE TOYS**

Droids | Drones | VR



# ON SALE NOW!

Available at **WHSMITH**, [MYFAVOURITEMAGAZINES.CO.UK](http://MYFAVOURITEMAGAZINES.CO.UK)

or simply search for Mobile Choice in your device's app store

# THE BEST FREE POP-UP BLOCKERS

Tell pop-ups to pop off



**T**he phrase 'pop-up' is a bit of an understated term given the manipulative form of today's invasive adverts.

Yes, they pop up. But they also pop under, hide themselves offscreen until you least expect them, leap up as new browser tabs and, most gallingly, shout annoying things at you until you seek them out and shut them down. Nobody wants to have to deal with a pop-up.

Before we get into the best tools to do away with them, please note that most modern browsers – including Microsoft Edge, Google Chrome and Firefox – come with built-in options for disabling pop-up windows.

Here's the thing, though: whichever browser you use, you'll no doubt have noticed that its default pop-up blocking skills leave a lot to be desired. Time to enlist the best third-party pop-up blocker you can find...

# 1 Poper Blocker

<https://poperblocker.com>



Available as an extension for Google Chrome, it was a head-to-head battle between this and Popup Blocker Pro over which would make it on to our list. The slightly anonymous authorship (and occasional suspicious

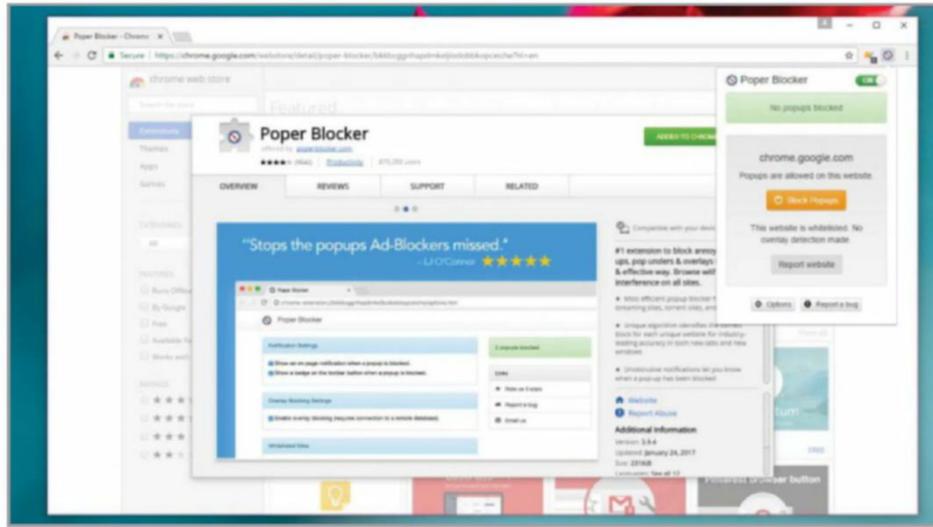
triggering of our anti-virus software) of Popup Blocker Pro saw Poper Blocker come out on top, but it has a lot going for it besides trustworthiness.

Designed specifically with the web's most pop-up filled sites in

**Poper Blocker does a proper job of blocking pop-ups.**

mind – we're sure you know the sort of thing – Poper Blocker does a great job at quashing the majority of pop-ups, pop-uppers, unwanted new tabs, and even those supremely-irritating site overlay layers.

Poper Blocker is not, primarily, an ad blocker; yes, it's designed to work harmoniously alongside them if you so wish, but you can equally run the extension alone to support your favourite sites without being hit by the most egregious of online ads. With active, personalised support from its developer, Poper Blocker is only getting better as time goes on.



RATING



# 2 AdwCleaner

[www.malwarebytes.com/adwcleaner/](http://www.malwarebytes.com/adwcleaner/)

We recommended AdwCleaner a couple of years ago, and we're maintaining our recommendation here. Not necessarily because of its capabilities at protecting your browser – although it does a brilliant job at squashing home page hijacks and removing toolbars – but because of its

ability to clean up undesirable software that you might not even realise is there. If you've ever had a mysterious pop-up outside of your browser, or a cryptic (or simply bothersome) system message, there's probably some kind of malware present. That's not just bad from an irritation

standpoint; you never know what data it's collecting about you.

So, regularly fire up AdwCleaner – firstly, in its Scan mode, and then in its Clean mode – to hunt through your system for adware and expunge everything from fake Firefox profiles to full-blown hidden advert factories.

AdwCleaner is now owned by Malwarebytes, creators of our favourite free anti-malware tool, and that means one of two things: either the program will inherit technology from its new parent and get better, or it'll be folded into Malwarebytes Anti-Malware and disappear.



**Malware is a common source of pop-ups, so wipe out infections with AdwCleaner.**



RATING



### 3 Noscript Security Suite

<https://noscript.net>

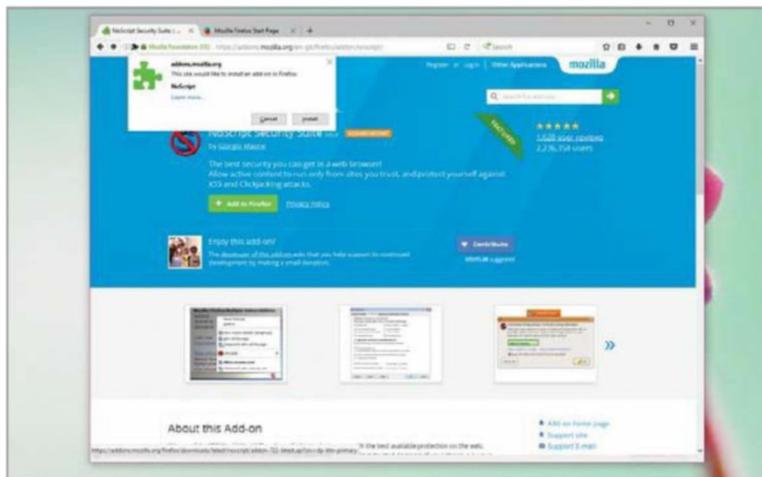
An extension made specifically for Mozilla's Firefox web browser (and with functional equivalents such as ScriptSafe available for Google Chrome) Noscript Security Suite isn't what you'd traditionally think of as a pop-up blocker – it doesn't, technically, block pop-ups at all. What it does is offer you fine

control over the Javascript items that are allowed to run in your browser, meaning the sneaky scripts, which manage to weasel their way past Firefox's built-in pop-up blocker won't get a chance to run.

This is, naturally a boon to internet safety – with scripts on all

websites blocked unless you specifically whitelist those locations, there's no way that anything malicious, let alone a pop-up, could run without your permission. This includes the likes of cross-site scripting (XSS) attacks and so-called 'clickjacking'. Plus Noscript Security Suite also helps block advertising and malware annoyances that use Flash and other plugins.

Granted, you'll have a bit of a battle facing you until you have whitelisted all of your favourite websites, but once you have you'll quickly settle in to a world of pop-up-free bliss.



**Noscript stops sneaky Javascript operations that produce pop-ups.**



**RATING**



### 4 Goodblock

<https://goodblock.gladly.io>

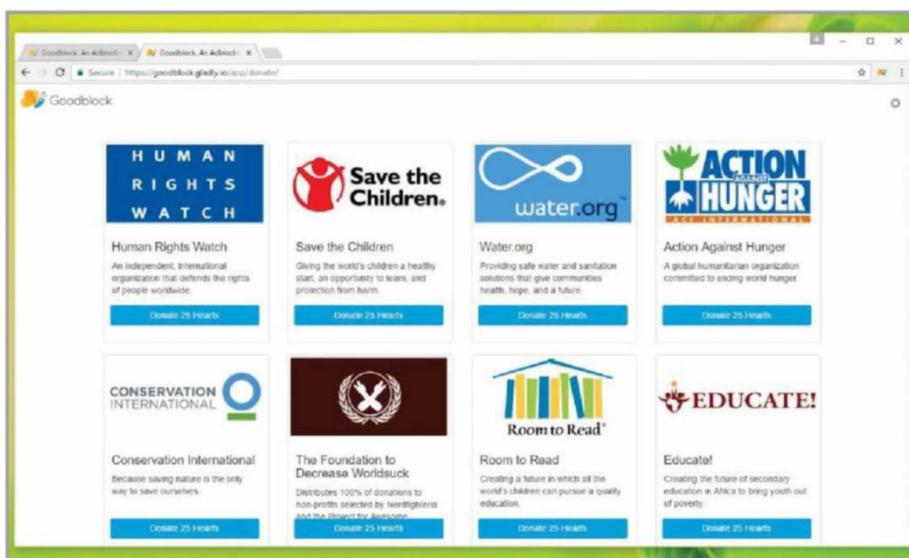
We were consciously avoiding covering direct ad blockers in this list, but this one is a little bit different, so we'll give it a pass. Goodblock will, naturally, keep the worst Chrome pop-ups at bay,

block advertisements on websites unless you use its quick menu to whitelist them, and helps stop you being from tracked as you browse around the web. It'll also, er, show you its own ads.

**Goodblock: a pop-up blocker that helps raise money for charity.**

That practice is not as cross-purpose as it seems, because this is an ad and pop-up blocker for those with a conscience. Once a day, Goodblock's cute butterfly mascot – the irrepressible 'Tad' – will pop up in the corner of your browser. Give him a click, watch the curated ad that pops up in a new window, and you'll raise a little money for Goodblock's charity partners, which include Save The Children, Action Against Hunger and Room to Read.

The ads are generally rather good, too; we're not going to say you'll want to click on them, but you equally won't regret it.



**RATING**



Windows Help & Advice is an internationally licensed title and is exported to another 22 countries.

**Future Publishing Limited**  
 Quay House, The Ambury, Bath, BA1 1UA  
 Tel: 01225 442244 Fax: 01225 732275  
 Email: [windowsmagazine@futurenet.com](mailto:windowsmagazine@futurenet.com)

**EDITORIAL**

**Editor** Rob Mead-Green  
[rob.mead-green@futurenet.com](mailto:rob.mead-green@futurenet.com)  
**Art Editor** Jamie Schildhauer  
**Deputy Editor** Nick Odantzis  
**Editor-In-Chief** Graham Barlow  
**Editorial Director** Paul Newman  
**Senior Art Editor** Jo Gulliver

**CONTRIBUTORS**

Desire Athow, Alex Blake, Alex Cox, Cat Ellis, Ian Evenden, Dan Grabham, Matt Hanson, Nate Jordan, Cliff Joseph, Jon Porter, Nick Peers, Danny Philips

**COVER IMAGES**

Jamie Schildhauer

**PHOTOGRAPHY**

Future Photo Studio, Thinkstock.com  
 All copyrights and trademarks are recognised and respected

**ADVERTISING**

Media packs are available on request

**Commercial Director** Clare Dove

[clare.dove@futurenet.com](mailto:clare.dove@futurenet.com)

**Advertising Director** Richard Hemmings

[richard.hemmings@futurenet.com](mailto:richard.hemmings@futurenet.com)

01225 687615

**Sales Executive – Technology** Callum Staines

**Director of Agency Sales** Matt Downs

**Ad Director – Technology** John Burke

**Head of Strategic Partnerships** Clare Jonik

**INTERNATIONAL**

Windows Help & Advice is available for licensing. Contact the International department to discuss partnership opportunities

**International Licensing Director** Matt Ellis

[matt.ellis@futurenet.com](mailto:matt.ellis@futurenet.com)

**PRINT SUBSCRIPTIONS & BACK ISSUES**

**Web** [www.favouritemagazines.co.uk](http://www.favouritemagazines.co.uk)

**Email** [contact@myfavouritemagazines.co.uk](mailto:contact@myfavouritemagazines.co.uk)

**Tel** 0344 848 2852

**International** +44 344 848 2852

**CIRCULATION**

**Circulation Director** Darren Pearce – 01202 586200

**PRODUCTION**

**Production Manager UK & US** Mark Constance

**Production Project Manager** Claire Scott

**Advertising Production Manager** Joanne Crosby

**Digital Editions Controller** Jason Hudson

**Production Controller** Nola Cokely

**MANAGEMENT**

**Finance & Operations Director** Angie Lyons-Redman

**Creative Director** Aaron Asadi

**Art & Design Director** Ross Andrews

**International** +44 344 848 2852

**PRINTED BY**

William Gibbons & Sons Ltd, 26 Planetary Road, Willenhall, West Midlands, WV13 3XT

**DISTRIBUTED BY**

Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU  
[www.marketforce.co.uk](http://www.marketforce.co.uk) Tel 0203 787 9060



Future is an award-winning international media group and leading digital business. We reach more than 57 million international consumers a month and create world-class content and advertising solutions for passionate consumers online, on tablet & smartphone and in print.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR).  
[www.futureplc.com](http://www.futureplc.com)

**Chief executive** Zillah Byng-Thorne  
**Non-executive chairman** Peter Allen  
**Chief financial officer** Penny Ladkin-Brand  
**Managing director, Magazines** Aaron Asadi  
 Tel +44 (0)1225 442 244 (Bath)

We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill holds full FSC (Forest Stewardship Council) certification and accreditation.



A member of the Audit Bureau of Circulations

Want to work for Future?  
 Visit [www.futurenet.com/jobs](http://www.futurenet.com/jobs)

**Disclaimer**

All contents © 2017 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any other changes or updates to them. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

If you submit material to us, you warrant that you own the material and/or have the necessary rights/permissions to supply the material and you automatically grant Future and its licensee a licence to publish your submission in whole or in part in any/all issues and/or editions of publications, in any format published worldwide and on associated websites, social media channels and associated products. Any material you submit is sent at your own risk and, although every care is taken, neither Future nor its employees, agents, subcontractors or licensees shall be liable for loss or damage. We assume all unsolicited material is for publication unless otherwise stated, and reserve the right to edit, amend, adapt all submissions.

# In the next issue...

Get more from your Windows PC

**ON SALE**  
**Friday**  
 15 September  
 2017



## SPEED UP YOUR PC

Make your computer feel like new with our in-depth guide

## RETHINK THE WAY YOU USE WINDOWS 10

Time-saving tips, tricks & secrets

## HOW TO

- Stop malware and viruses
- Declutter your computer
- Add filters to photos
- Personalise your PC



\* Contents subject to change

Catch up with us on...



[www.facebook.com/windowsmag](http://www.facebook.com/windowsmag)



[www.twitter.com/windowsmag](http://www.twitter.com/windowsmag)

[www.facebook.com/windowsmag](http://www.facebook.com/windowsmag)

# lifehacker | UK

Helping you live better & work smarter



## LIFEHACKER UK IS THE EXPERT GUIDE FOR ANYONE LOOKING TO GET THINGS DONE

- Thousands of tips to improve your home & workplace
- Get more from your smartphone, tablet & computer
- Be more efficient and increase your productivity

[www.lifehacker.co.uk](http://www.lifehacker.co.uk)

[twitter.com/lifehackeruk](https://twitter.com/lifehackeruk) [facebook.com/lifehackeruk](https://facebook.com/lifehackeruk)

LOSE YOURSELF IN A WORLD OF

# Vinyl

FIND YOURSELF IN  
OXFAM'S ONLINE SHOP

[oxfam.org.uk/shop](http://oxfam.org.uk/shop)



OXFAM

© 2012

9000