Get ready for Windows 11

Barry Collins shows how to prepare your PC for the first new version of Windows in five years

New versions of Windows don't come along all that often these days. Indeed, if you'd taken Microsoft at its word a few years ago, Windows 11 should never have arrived at all.

But here we are, with a new version of Windows on the near horizon, with Windows 10 users set to qualify for a free upgrade to the new operating system. Before you hit that Upgrade button in Windows Update, however, you should take this once-in-a-computing-generation opportunity to get your PCs in order and ready to take full advantage of the new OS.

First, however, it's worth considering if you should – or can – upgrade to Windows 11. We'll explore the pros and cons of upgrading a Windows 10 PC and dive into the detailed system requirements to help you work out whether your PC is even up to the job.

We'll walk through the process of getting your PC ready for Windows 11 by clearing space and trimming the fat from your system to make the upgrade as smooth and fast as possible. We'll also reveal how to avoid the upgrade blockers that might prevent you being offered Windows 11, even if your PC ticks all the system requirements.

We'll then run you through how to take a full system backup ahead of the upgrade, so that if anything does go wrong during the process, you can put your PC back to how it was. And, finally, we'll talk about when you can expect to see Windows 11 coming down the pipe.

Should you even upgrade?

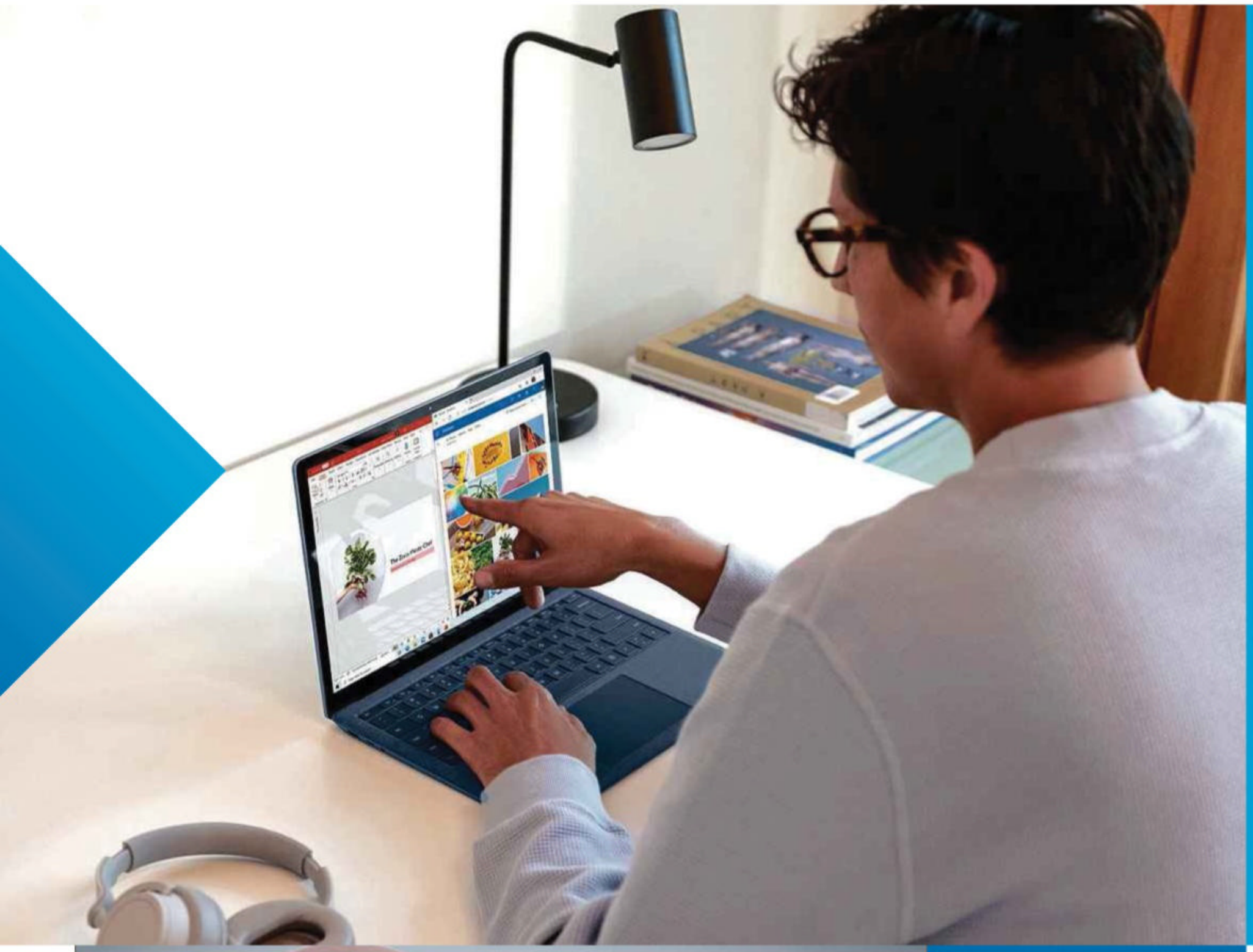
Before we get our teeth into preparing your PC for Windows 11, there's a question you need to ask yourself: is it worth upgrading this PC in the first place?

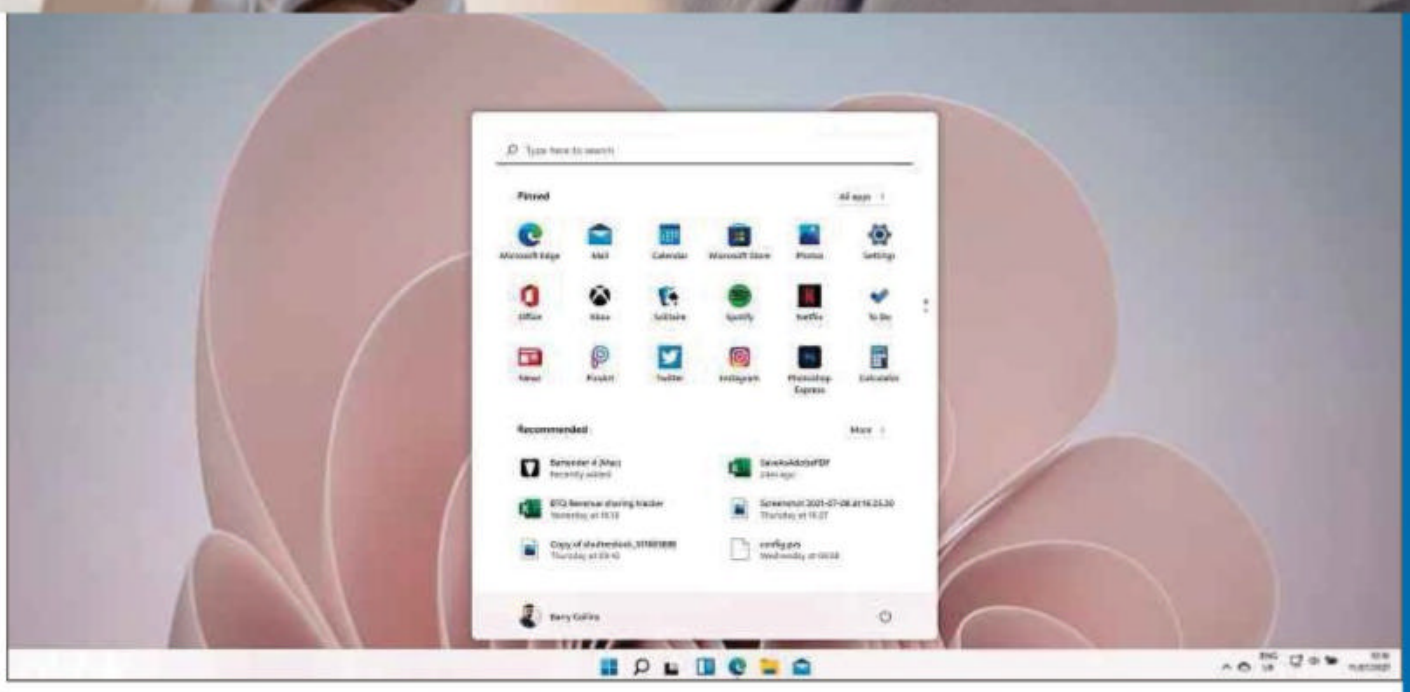
The pull to have the latest version of Windows is undeniably strong, especially if you're already running Windows 10 and qualify for the free upgrade. Indeed, if you're running Windows 10, you're going to be nagged by Microsoft to upgrade at some point.

However, there are strong reasons for staying put, especially if none of the new features are going to make a fundamental difference to your day-to-day computing (*see "What's in Windows 11 that's not in 10?"*).

The best reason for staying put is not rocking the boat. We'll come to the minimum and somewhat controversial requirements in the next section, but even if your PC does manage to tick those boxes, it doesn't necessarily mean you're in for a smooth experience.

There's always the chance that something will go wrong during the update process and you will end up





with a borked installation. Microsoft has got much better at smoothing the Windows upgrade path in recent years – it's nothing like as hairy as it was in the days of Windows 98 or XP – but with gazillions of different combinations of hardware and software out there, there's a genuine chance your PC will be one of those that trips up. No OS update comes without risks.

If your PC is on the cusp of the minimum hardware requirements, it's an even harder judgement call. Development of Windows 10 is effectively complete now. There might be a few new features added here and there – such as the updated Microsoft Store – but you can be confident that if your PC is capable of handling Windows 10 now, it will do so indefinitely.

ABOVE Windows 11 offers lots of new features, but you don't need to rush

What's in Windows 11 that's not in 10?

Here's a list of features, correct at the time of going to press, that you will find in Windows 11, but not in Windows 10.

- **Support for Android apps**
- **Desktop widgets**
- **Customisable desktops**
- **Snap Layouts and Snap Groups (features that allow you to more easily position multiple apps on a screen)**
- **Better multi-monitor support**
- **Auto HDR in games**
- **Improved tablet controls and software keyboard**
- **Haptic feedback from pens (on new hardware only)**

OFFICIAL REQUIREMENTS	HOW TO CHECK FOR THEM
A 1GHz or faster 64-bit processor, with two or more cores. Full list of compatible Intel and AMD processors at pcpro.link/325reqs	To check your current processor, open System Information (search for it in Windows Search if you don't know where it lives) and check the listing under the Processor section. Essentially, you're looking for an AMD Ryzen 3 or eighth-generation Intel Core processor or newer, with a few exceptions. Speculation is that Microsoft set the bar this high not because of performance worries, but to avoid further problems with the unfixable Spectre and Meltdown vulnerabilities. We suspect Microsoft will lower the bar.
4GB of RAM	As above, System Information will reveal how much "Installed Physical Memory (RAM)" your PC has. It would be brave to run Windows 11 on a system with anything less than 8GB.
64GB or larger hard disk/SSD	In System Information, click Storage and then Disks to check the size of your SSD/hard disk. Don't even think about running Windows 11 on only 64GB of storage. We'd say 256GB is the bare minimum, ideally 512GB or greater.
UEFI/Secure Boot	Back in System Information, click System Summary, and then ensure BIOS Mode says "UEFI" and Secure Boot State doesn't say "unsupported".
TPM 2	To check if your system has a TPM 2 chip, open the Device Manager (use Windows Search to find it). If you have a TPM, it will appear under Security Devices. Check you have version 2. If you don't see Security Devices, you don't have one. Our bet is this requirement will eventually be dropped.
DirectX 12 compatible graphics on a 720p display that is greater than 9in	To check if you have DirectX 12 compatible graphics, type "dxdiag" into the Start menu to run the DirectX Diagnostics Tool. Under System Information in the System tab, you will hopefully see DirectX 12. If not, your system is unlikely to make the cut.

The same can't be said if you move up to Windows 11. As we saw with Windows 10, the minimum hardware requirements creep up over time. If your PC scrapes through the minimum requirements now, it may not in a year or two. Performance will also diminish as that bar keeps being raised. If you don't have plenty of headroom in the hardware requirements, it may be wiser to stick with what you know works.

Support for Windows 10 won't end anytime soon. Microsoft has guaranteed to support Windows 10 with security updates through to 2025, and if past history is anything to go by, there's every chance of that deadline being pushed back if there's still a sizeable community of Windows 10 users when the cut-off date is nearing.

In other words, don't feel compelled to take Windows 11 just because you have been offered it. Weigh up the pros and cons carefully before clicking that Update button.

Meeting the minimum system requirements

It's fair to say the Windows 11 minimum hardware requirements have caused something of a stir. We might even go as far as brouhaha.

In addition to raising the bar quite significantly when it came to the processor your PC will require to run Windows 11, Microsoft announced that Windows 11 users would also be required to use a TPM 2 chip, something that millions of Windows 10 PCs and laptops won't have.

The fury sparked by Microsoft's stringent set of requirements seems to have spooked Redmond. Not only did it take down and then adjust the PC Health Check tool that it recommended people use to check if their PC was Windows 11 compatible, Microsoft also swiftly lowered the bar – for beta testers, at least.

The first official beta would only install on systems that met the stated minimum requirements, "with the exception for TPM 2 and CPU family/model" – the two requirements that caused the most controversy in the first place.

Microsoft says that "by providing preview builds to the diverse systems in our Windows Insider Program, we will learn how Windows 11 performs across CPU models more comprehensively, informing any adjustments we should make to our minimum system requirements in the future".

All of which means, at the time of writing, that we can't be 100% sure what the minimum requirements for Windows 11 will be because Microsoft is dithering.

Opposite, then, is a table of the minimum requirements as they stand, with our guide to how to check for them.

Clearing space for Windows 11

Windows 11 in itself isn't all that big. The download of the beta was less than 5GB and we've got it running comfortably in a virtual machine that's only 15GB in size.

That said, an upgrade to a new OS is the ideal time for a clear out. The fewer applications you need to transfer to Windows 11 (assuming you're performing an in-place upgrade), the quicker the process will be and the likelihood of something going wrong with the upgrade is reduced.

It's a similar story for files. Although it shouldn't theoretically make any difference to Windows 11 if your hard disk has 100 or 100,000 photos stored on it, the more data you have, the longer it will take for the new OS to index all those files in its search, meaning it will take a while for Windows 11 to get up to maximum speed and utility. Take the opportunity to start with the cleanest possible slate.

You don't need us to introduce you to the Apps & Features section of the Windows 10 settings menu, where you can uninstall any apps you no longer need. Remember, however, that this menu lets you order applications by both size and date of installation, as well as name. This can be handy for weeding out whopping great apps that are taking up disk space and those apps that you installed sometime in the distant past and have long since abandoned.

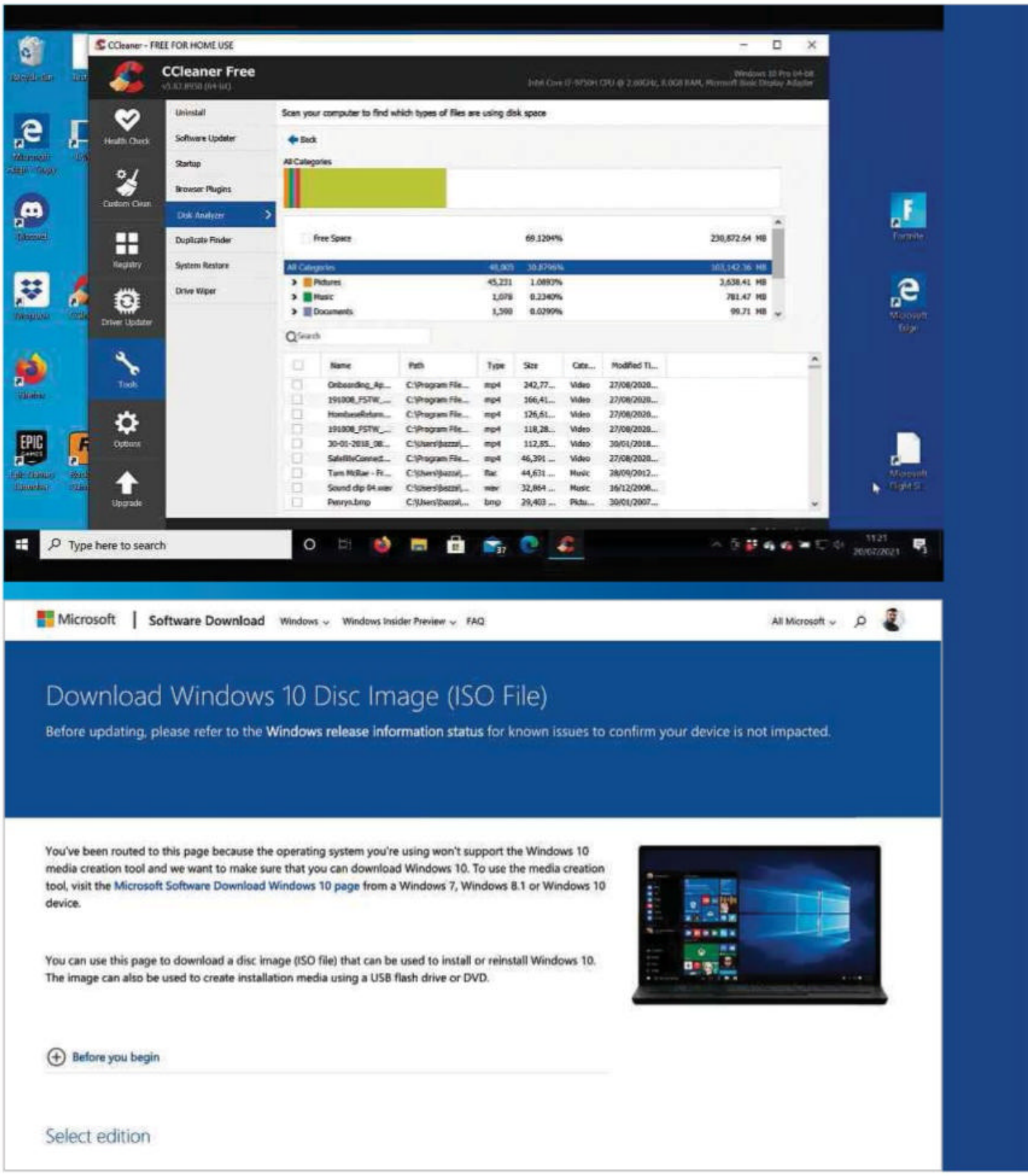
If you need a little extra help with the clear out, Piriform's CCleaner has several useful tools (the free version is available to download from **ccleaner.com**, but watch out for the ironic attempt to bundle antivirus in during the installation).

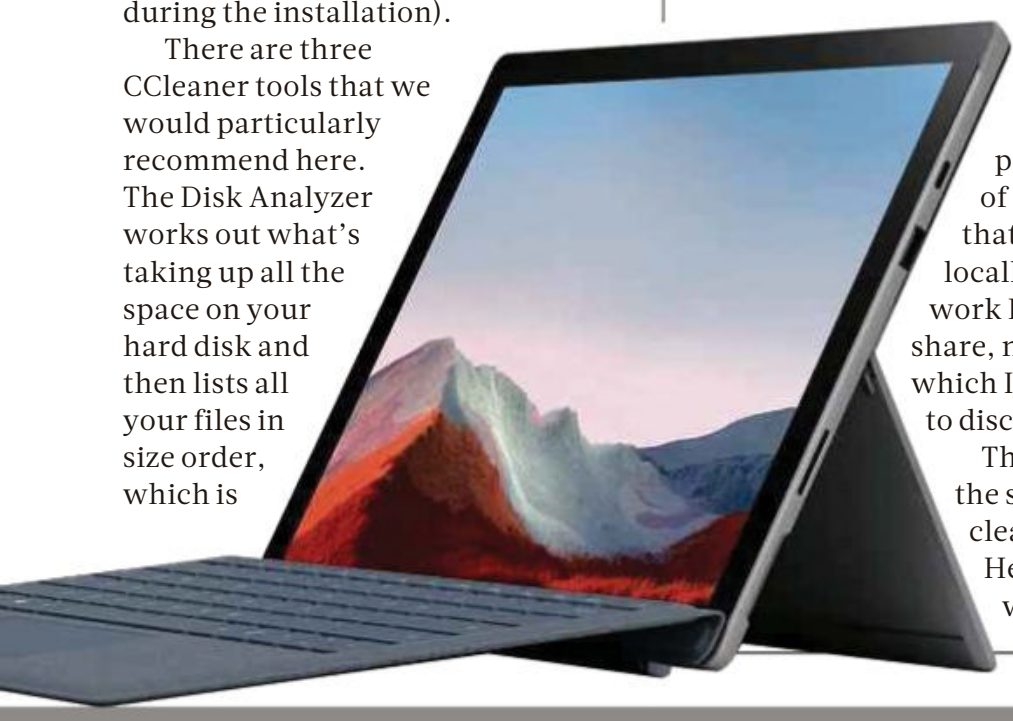
There are three CCleaner tools that we would particularly recommend here. The Disk Analyzer works out what's taking up all the space on your hard disk and then lists all your files in size order, which is helpful for weeding out massive installers or videos you've got stashed away and no longer need.

The Duplicate Finder is obviously helpful in reducing needless copies of files. Just make sure to carefully review the list of duplicates it finds, as there's often a good reason you have got duplicates (for example, it picked up lots of documents that I have stored locally and in a work Dropbox share, neither of which I would want to discard).

Thirdly, either the standard cleaner tool or Health Check will offer to wipe away temporary files, which are often clogged with old installers or other stuff that you're never going to need. Again, just make sure nothing critical is being flushed away.

One final thing: CCleaner also has a utility that checks all your drivers are up to date. You might want to run that this side of the installation, so that if something such as a display driver or Wi-Fi card has been updated for Windows 11, you don't clatter into problems once Windows update has done its thing.





TOP CCleaner can help you get rid of the buildup of digital cruft

ABOVE If you've hit an update brick wall, download the latest version of 10

LEFT Check the specs list to see if your machine can handle Windows 11

Removing upgrade blockers

As we'll come to later, there's a degree of uncertainty over when the Windows 11 upgrade will be offered to Windows 10 users. But when it is ready to start flooding down the pipes, you want to make sure that Windows Update isn't standing in the way.

Windows updates frequently get stuck, and if your Windows 10 machine is not up-to-date then you're unlikely to be offered Windows 11. If you search for "Windows Update" in Windows 10 and open the Windows Update settings, you should be able to see if you've got the latest updates installed and if anything is stuck.

Here, then, with the help of our PC repair expert, Lee Grant, are the four ways to ensure nothing is getting in the way of Windows 11. Make sure you've got a full backup of your data before attempting any of these.

1 Force the updates through

If Windows Update has got stuck on an old version of Windows 10, you can try unblocking the pipes by visiting Microsoft's Media Creation Toolkit website (**pcpro.link/325win10**) and seeing if you can download the latest edition of Windows 10 from there.

You can either save the files to a suitably well-endowed USB stick, an external hard disk, or even just the downloads of the computer that's stubbornly refusing to update.

Let's assume you're going to use the current PC. Go to the link above and select the "Download tool" now option on the website.

Once the tool has downloaded, click on it, accept the licence agreement and then select "Create installation media". Choose the correct language, edition and architecture for your machine (the recommended ones should be fine) and then select "ISO file". Select Finish when it's complete (you don't need to burn a DVD in 2021).

Now just double-click on the ISO and follow the instructions. During the process, the machine should display a message to confirm that all user data and programs will be kept intact, but make sure you have done that backup (*see next section*), just to be sure.

2 Update drivers

As mentioned above, outdated drivers can also prove to be an update blocker. Driver updates are one of those jobs that tend to be put off and put off until you have a problem, so it's definitely worth checking that the key drivers for things such as wireless chipsets and displays are bang up to date.

Your PC manufacturer might provide a utility that does the heavy lifting for you here. Lenovo Vantage or Dell Update are examples of such tools. If not, the aforementioned CCleaner will check if your drivers have been updated since Theresa May stood down.

3 Check the update system

If you're still having no joy, it might be time to kick the tyres of the Windows Update system itself and make sure nothing has gone awry with that.

To do this, you'll need to download the Windows Update Troubleshooter from **pcpro.link/325trouble**. Run that application and select Windows Update from the list of options in the wizard. You'll need to select the option to run as administrator in the menus that follow, but it will eventually scan your system and (fingers crossed) amend any issues it finds with the updater itself.

If you get no joy with that, it's time to crack open the command prompt and try a few repair tools.

Search for command prompt in the Windows 10 Start menu, right-click on it to "Run as administrator" and then type in the following line of code:

```
dism.exe /Online /Cleanup-image /Restorehealth
```

This process may take a while, but can help to clear up persistent problems. Whilst you're at it, enter:

```
sfc /scannow
```

This will run a System File Check, which is another tool on the lookout for things that have gone wonky. And finally give the Check Disk system a go by typing:

```
Chkdsk /f/r
```

Once you have performed all these tests, try running the Windows Update Troubleshooter again to see if it finds any faults this time.

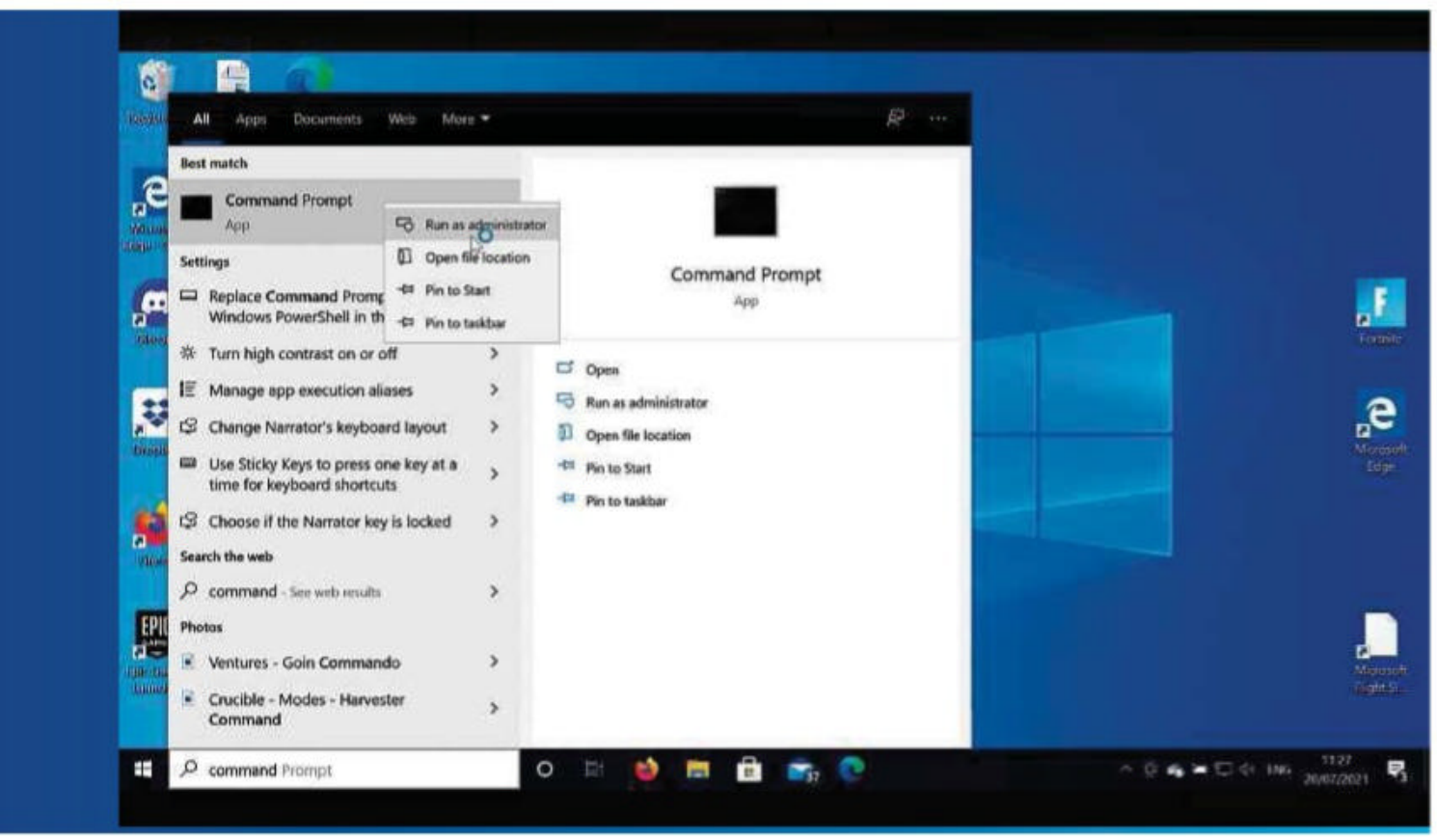
4 Firmware flashing

The final frequent blocker if firmware. If your firmware is out of date then Windows might refuse to move on.

Again, those utilities that came with your PC will often check to see if your firmware (or BIOS) is up to date. Follow the instructions from within the app.

Failing that, you can pay a visit to your laptop or motherboard manufacturer's website and see if there is any updated firmware to download. The installation process will differ from manufacturer to manufacturer, but you may need to create a USB installation stick. Again, follow the instructions on the manufacturer's site.

BELOW If Windows Update isn't playing ball, open up the command prompt



Prepare a backup

It doesn't matter how many millions of people test the betas or how "safe" the Windows 11 upgrade is according to some goon on Twitter, there's always the potential for an operating system upgrade to go wrong. It's highly unlikely that anyone has upgraded to Windows 11 with your precise combination of hardware, software and drivers, which means there's always a chance – however slim – that your installation is going to smack into a wall. And when it does, you will be glad of a full system backup to put everything back how it was.

Before you start here, you're going to need an external USB drive that's at least equal in size to the data stored on your main system drive.

Plug that (ideally empty) drive into your Windows 10 PC and then navigate to Settings | Update & Security | Backup and then have a dry chuckle to yourself as you navigate down to the "Looking for an older backup" section and click on "Go To Backup and Restore (Windows 7)".

On the left-hand side of the window that appears, click "Create a system image", select "On a hard disk" and select the backup drive. As you progress through the wizard, you'll be asked if there are any other drives you wish to include in the backup – take care to include both "drives" if your main hard disk has been partitioned, for example.

You'll eventually reach a prompt to start the backup. Don't bother with the prompt to create a system repair disc, as that's a carryover from the optical drive era.

Windows will then get on with creating the backup in the background. You can carry on using your PC in the meantime.

Restoring your PC

Should push come to shove and you find you need to restore your PC after a borked Windows 11 installation, the process is pretty simple.

1 Connect the backup drive to a switched off PC.

2 Fire up the PC.

3 You should hopefully see a USB bootable drive prompt. If not, you may need to dive into your UEFI/BIOS settings and change the boot drive order to put USB first. A quick Google will reveal how to access the UEFI/BIOS on your system.

4 On the Windows setup page, choose the appropriate language and so on.

5 On the next screen, don't click Install Now, but choose the "Repair Your Computer" link.

6 Click the Troubleshoot option on the next screen.

7 On the System Image Recovery screen that appears next, you should hopefully see Windows 10. On the next screen, choose the "Latest available system image".

8 Check the next couple of screens carefully to make sure you are restoring to the correct drives and click Finish when you're ready. The process might take a good while, depending on the amount of data being recovered, but when it's done, it should reboot and then finish the restoration. Your Windows 10 PC will hopefully be returned to a working state.

When will the upgrade arrive?

If, having read this feature, you're now itching to get going with an upgrade to Windows 11, we're sorry to say that you might have a wait on your hands.

Microsoft has rather fudged the news of when Windows 11 will be offered as an in-place upgrade. The OS will arrive on new PCs from this autumn and in-place upgrades are traditionally offered at the same time, but it seems the plan might be different this time around.

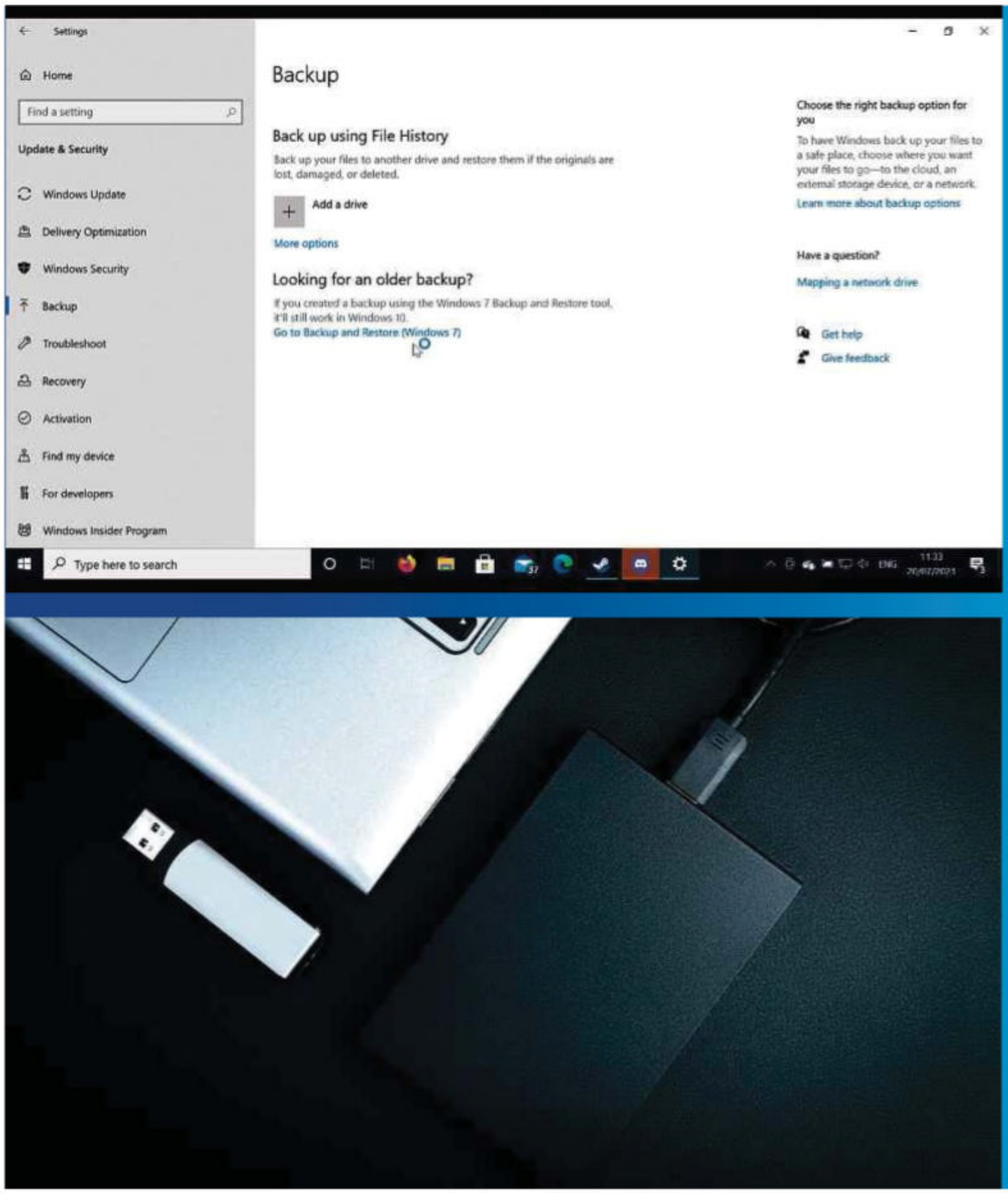
At the time of writing, an FAQ on Microsoft's Windows 11 website said that "the upgrade rollout plan is still being finalised, but for most devices already in use today, we expect it to be ready sometime in early 2022".

"Not all Windows 10 PCs that are eligible to upgrade to Windows 11 will be offered to upgrade at the same time," Microsoft adds, which is fairly normal – upgrading tens of millions of PCs simultaneously would cause an enormous, unsustainable rush on Microsoft's servers.

We asked Microsoft to confirm the upgrade timeline, but the company was curiously reluctant to speak on the record, which suggests that the plans are fluid and subject to change. Don't be surprised if Microsoft gives PC manufacturers a brief window of opportunity to sell Windows 11 PCs before the operating system is available for upgrade.

In the meantime there is, of course, the beta, which you can sign up for (again, at the time of writing) by joining Microsoft's Windows Insider Program, which you can do via the Windows Update settings in Windows 10.

We strongly recommend that you don't install a beta operating system on an everyday system that you need for work or even home use. The beta is still wobbly, prone to crash and is largely unsupported, as all beta software is. However, if you have a spare Windows 10 PC lying around or are comfortable with installing operating systems in virtual machines, you can find out what all the fuss is about.



TOP Create a full system backup just in case the worst comes to the worst

ABOVE And ensure that you've got a big USB drive to hand before you start