10 ways you are accidentally damaging your PC without knowing it

I know for a fact that you can own a PC for years, do nothing to keep it in good shape, and still get away with it. But I also know that neglecting some basic maintenance can result in anything from performance drops to full-on disasters.

Chances are you're neglecting some or all of the below. They're all easily fixed, so check them out — the benefits could be substantial.

1. Regular dust removal

Your PC just wants to breathe a little
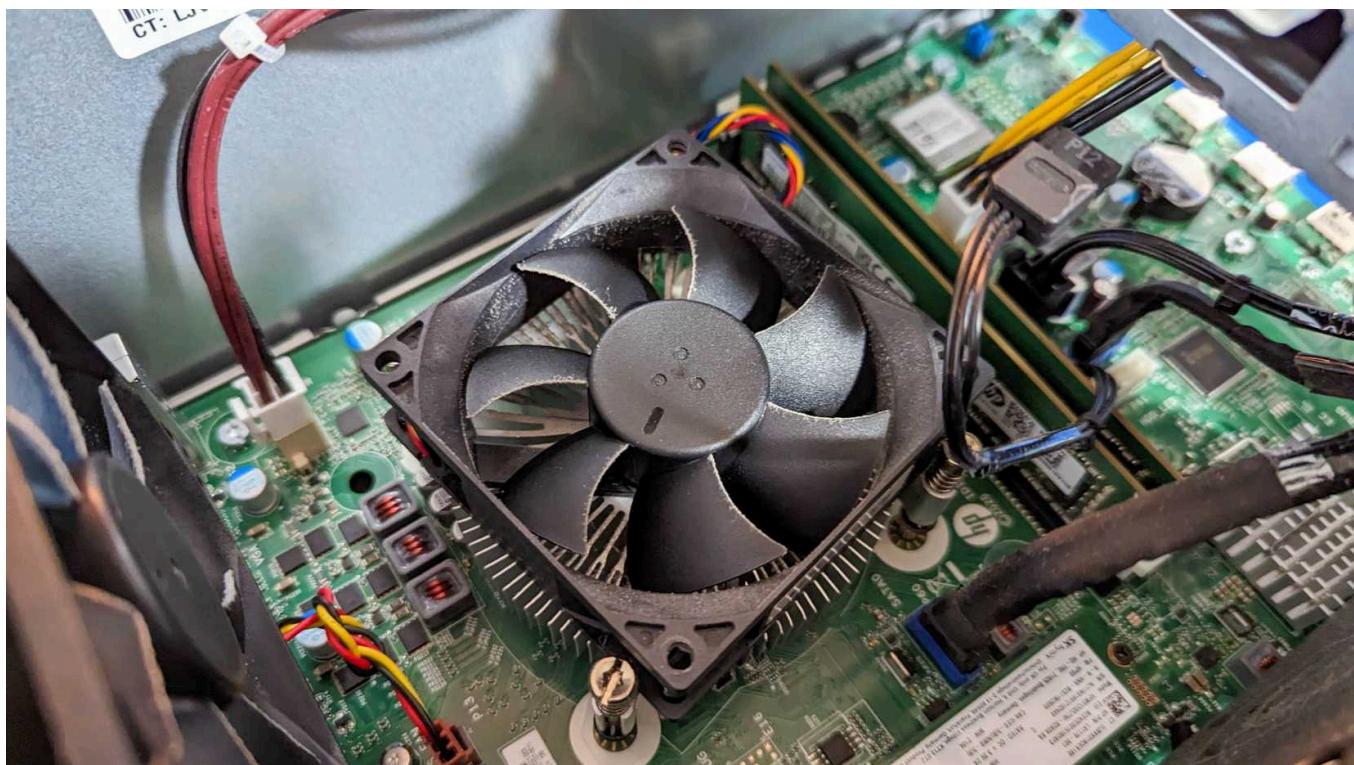
Credit: Jordan Gloor / How-To Geek

Both desktops and laptops need regular dust removal, and it's not all about your [PC aesthetics](). It's about keeping it healthy.

Excessive dust may raise temperatures, which in turn makes your cooler and fans work overtime. Your PC gets noisy as a result, and the longer this goes on, the more you're in danger of thermal throttling.

To [safely clean your PC](), power it down and unplug everything. Ground yourself by touching the metal part of your case or by using an anti-static wrist strap. Don't set your PC down on the carpet; put it up somewhere clean and static-free.

Open up the case and get to work. I personally use a can of compressed air for most of it, but also an anti-static cloth. Remember to use short bursts of air.

You should generally aim to clean your PC once every three to six months, with a deep clean once a year.

Remember to hold down the fan blades when you're cleaning your PC.

You also can, and should, also clean the dust out of your laptop; this maintenance process isn't exclusive to desktop PCs.

Falcon Dust Off Compressed Air Can

Item Form
Compressed Air Can

**Specific Uses**
Dusting

Volume
3.5oz

A can of compressed air is my go-to for cleaning my PC. There are other ways to do it, but I find that this is the easiest and cleanest method as long as you're careful.

$14 at Amazon

2. Replace your thermal paste

This is another important step in keeping your PC healthy
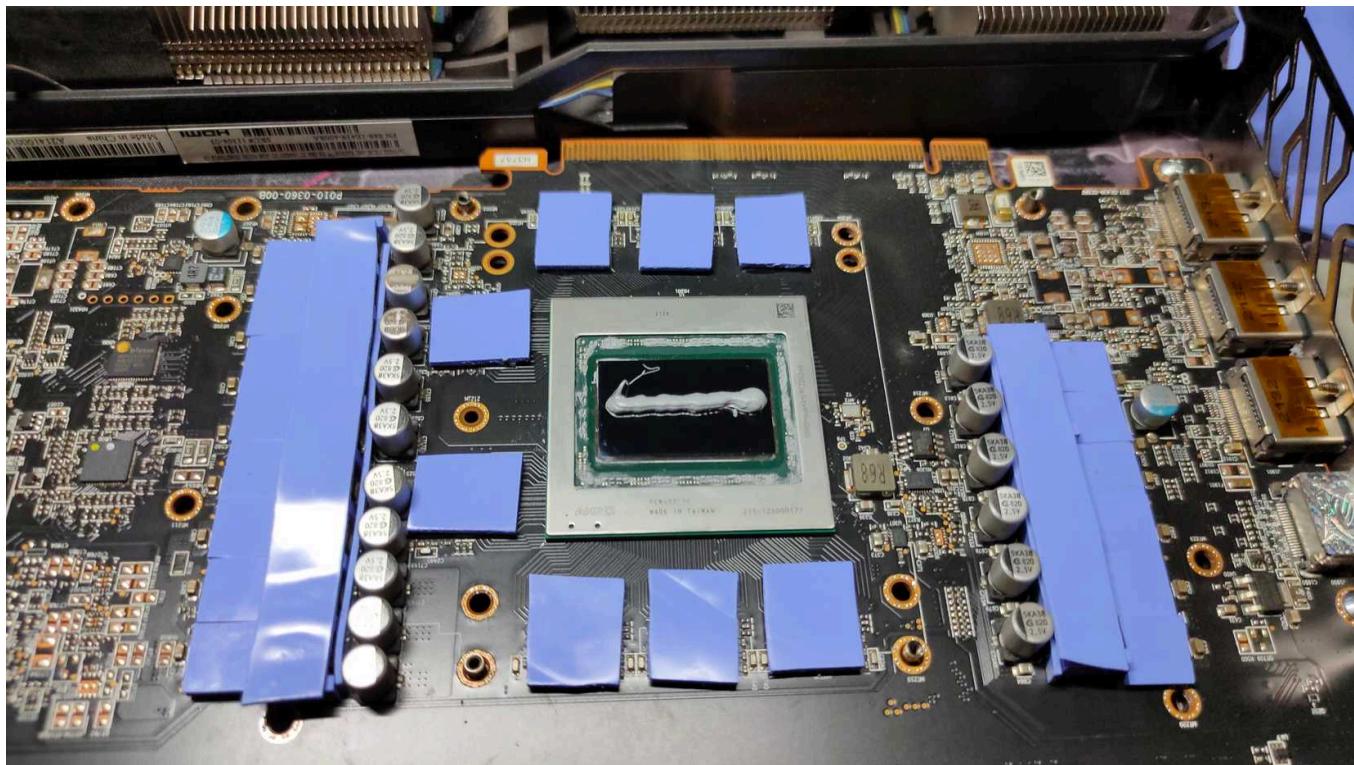
Credit: Ismar Hrnjicevic / How-To Geek

Thermal paste fills microscopic gaps between your processor's heat spreader and the cooler. It helps heat transfer efficiently. It doesn't cool your CPU on its own, but it's a vital sidekick for the actual cooler that helps it do its job properly. Re-pasting is something many of us neglect, but it's worth doing once every few years.

The easiest way to do it is while you're cleaning your PC, since you'll have to do the whole power down, ground yourself thing anyway.

First, remove the cooler by loosening the mounting screws.

Twist the cooler gently back and forth instead of pulling it straight up, as doing that runs the risk of damaging the CPU or the socket.

Once the cooler is off, check if it has pre-applied paste. If it does, don't add more on top — just clean it off. I clean the CPU and the cooler using coffee filters and 90%+ isopropyl alcohol.

Let it dry completely before you proceed. Next, apply a small, pea-sized amount of new paste directly to the center of the heat spreader.

Re-mount the cooler, and remember to use a crisscross pattern when tightening the screws. Connect everything and boot up your PC. Keep an eye on temperatures with a program such as HWiNFO.

There are also [reasons to change GPU thermal paste](#), but it's a much more complicated process that voids your warranty.

3. Less obvious driver updates

It's not just your GPU driver that needs attention

Credit: Ismar Hrnjicevic / How-To Geek

[Updating GPU drivers](#) is the easy part. Meanwhile, the other components in your PC could probably use some more driver-adjacent attention.

You may need to update your chipset, storage, and audio drivers manually on occasion. Windows Update is meant to be taking care of the majority of updates that aren't the GPU, but in my experience, it's not a perfect solution. If your PC is acting up, it's worth going over these and updating them. You'll find them directly on manufacturer websites.

It's often safer to stay away from very new versions of those "uncommon" drivers unless you desperately need them. Let them mature before downloading, as things like chipset drivers can affect your PC in a major way.

Don't bother using driver updating software, as a lot of it is not legitimate and it can make things worse. Of course, platforms like the Nvidia App or AMD Adrenalin are completely safe to use.

4. Updating the BIOS

You don't always need it, but it's good to know how
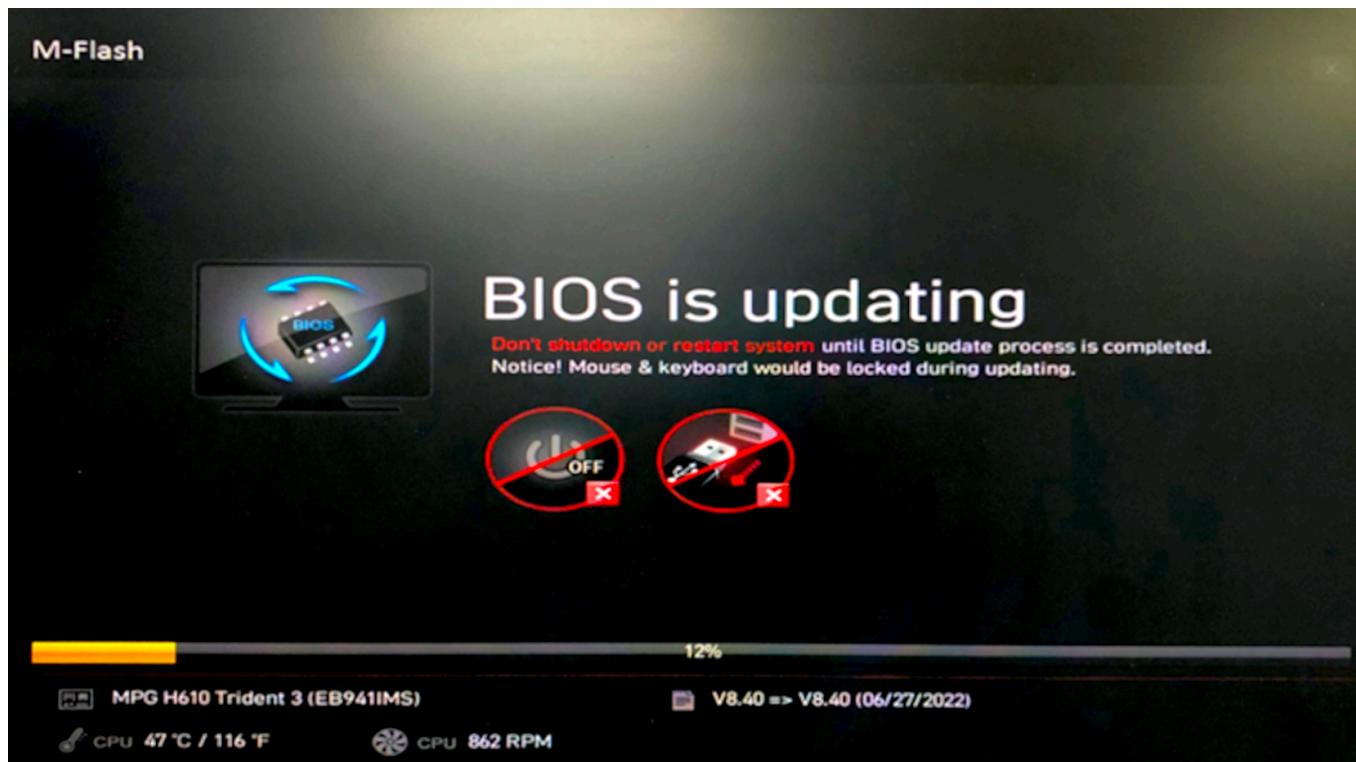
Credit: Michael Betar IV | How-To Geek/Micro-Star International

I wouldn't call updating the BIOS part of regular PC maintenance. I recommend doing it when you first get your PC as you may have a much older version of the BIOS installed. After that, come back to it if you ever run into problems or hear of important updates to your BIOS from the companies that made your CPU or motherboard.

Updating the BIOS can improve your PC's stability or performance, but it can also make it completely unusable. Be very careful when you handle these updates.

BIOS updates are handled differently by each motherboard, but the process always begins with checking which brand made your motherboard or your prebuilt PC. You'll then download a file and copy it over to a USB flash drive. Read the instructions carefully and don't skip any steps, as a comprehensive guide to updating the BIOS can be a true lifesaver here.

5. Optimizing your fans

Because PC cooling is a lot more complex than it seems at a glance

Credit: Ismar Hrnjicevic / How-To Geek

Good news: optimizing fan curves and speeds is a set-it-and-forget-it type of thing. Some power users, like overclockers, will tweak this a lot, but you only really need to go back and do it again if you're unhappy with the thermal performance or noise levels of your PC.

This is usually done in the BIOS, and I recommend doing it after updating it, as any future updates may reset your fan curves. Before you set off, consider whether you want your PC to be quiet, cool, or a balance of both. Some people prefer to keep their fans running at a steady RPM regardless of the load their PC is under.

Optimizing fan curves is a lengthy process, so I'll leave you with our guide to optimizing your CPU fan for minimal noise and the Fan Control app that makes the whole thing easier to do.

6. Figuring out your airflow direction

Smart airflow can do wonders for your PC

When you build your own PC, [optimizing your airflow](#) plays a major part in making sure all your components run nice and cool. The goal is to have a steady stream of cool air coming into the case while warm air escapes it in another direction.

Good airflow comes down to many factors:

- The right number of fans
- The right chassis with a front mesh panel
- Fan speeds
- Fan direction
- Air pressure inside the case

The exact configuration depends on your preference and your exact build, but I recommend using more intake fans (those that draw in cool air from outside) than exhaust fans (those that let it out of the case). They're the exact same fans, it's just about how you mount them in your case. You generally want intake fans in the front of the case, and exhaust at the back and the top.

How to tell the right way to install them? Most fans have small arrows on the frame that tells you airflow direction. If you can't find them, check out the fan structure. Air enters on the side with the open blades and exits on the side with the plastic frame that holds the motor.

7. Making sure your RAM runs at maximum speed

XMP/EXPO profiles are worth looking into

Credit: G.SKILL

Although the maximum speed listed on your RAM kit may be a lot higher, it won't run at that speed out of the box. The RAM speeds that you often see advertised are overclocked, and the default is the JEDEC spec, which is usually a lot lower. To make your memory run at the advertised speed, you can use one of the pre-set Intel XMP or AMD EXPO profiles that it came with.

XMP/EXPO is technically considered to be overclocking. It can lead to instability and problems with your PC.

Overclocking your RAM is easy. Intel has a guide on doing this with XMP, and the path for AMD will look pretty similar. You can even use XMP profiles on AMD CPUs — just check what your RAM kit is certified for.

8. Pruning startup tasks

You really don't need all that software

Credit: Hannah Stryker / How-To Geek

Does anyone else hate how many apps you install just default to launching at startup, and you need to change it manually for them to stop? The hidden boot tax is real. The more startup apps you have, the slower your PC will be to fully load. This is less of a problem if you use an SSD, but it still helps to prune these apps and only launch them when you actually need them.

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You can review the list of your auto-start apps by clicking on the Windows logo on your taskbar and typing in "Startup apps." Toggle them off and on. You can sort by name or startup impact to see which ones are the most problematic.

Things like updaters, tray utilities, and launchers are generally safe to disable, but if something sounds unfamiliar, search for it online first to make sure you don't need it.

9. Adjusting your monitor's refresh rate

Don't waste those precious frame rates

Credit: Tim Rattray / How-To Geek

Many monitors these days come with higher refresh rates than the default 60Hz, but your PC may not auto-switch to support that higher refresh rate. This means that even 144Hz, 240Hz, or 500Hz monitors will technically be capped at 60Hz until you adjust the settings in Windows.

You can adjust this by right-clicking on your desktop, then following this path: Display Settings > Advanced display. Choose the highest available refresh rate.

Some of the other [monitor settings you should change](#) while you're there include choosing the right resolution, setting up HDR, and enabling variable refresh rate (VRR).

10. Tweaking your PC power plan

You might be leaving a lot of performance on the table

Credit: Ismar Hrnjicevic / How-To Geek

You might discover some hidden performance by playing around with your power plan in Windows.

Type in "Power plan" in Windows search, and go into "Edit power plan." This gives you two basic settings that won't affect your PC's performance, but will have a major impact on its battery life: turning off the display and putting the computer to sleep.

The real goldmine hides under "Change advanced power settings." You can select the plan you want to use in the dropdown menu at the top, and generally, you'll almost always want to use the "Balanced" power plan. "High performance" sounds great on paper, but it can waste power and prevent idle states for no reason.

Some of these tweaks will only come in handy once, while others need re-visiting every so often. Not all of them may apply to your particular PC, but it's always good to keep them in mind in case they do. Computers are expensive — if you can make the most of yours, you'll only benefit.