Steps to Increase Your Windows 10 Speeds

If your PC is running slowly, the following suggestions might help speed things up. The tips are listed in order, so start with the first one, see if that helps, and then continue to the next one if it doesn't.

1. Make sure you have the latest updates for Windows and device drivers

One of the best ways to get the most out of your PC is to make sure you have the latest version of Windows 10 installed. When you check for updates, your PC will also search for the latest device drivers, which can also help improve your PC's performance.

To check for updates

1. Select the **Start** button, then select **Settings** > **Update & Security** > **Windows Update** > **Check for updates**.
   Check for Windows updates

2. Do one of the following:

   - If the status says "You're up to date," go to the next tip.

   - If the status says "Updates are available," select **Install now**.

3. Select the updates you want to install, then select **Install**.

4. Restart your PC and see if it seems to run better.

For more info about updates, including how you can have them installed automatically, see the Windows Update FAQ.

For Windows Update troubleshooting info, see Update Windows 10 and Troubleshoot problems updating Windows 10.

If your PC still runs slowly, continue to the next tip.

2. Restart your PC and open only the apps you need

Having many apps, programs, web browsers, and so on open at once can slow down your PC. Having a lot of browser tabs open at once can also slow it down quite a bit. If this is happening, close any apps, browser tabs, etc., that you don't need and see if that helps speed up your PC. If it doesn't seem to help, restart your PC and then open just the apps, programs and browser windows you need.

To restart your PC

1. Select the **Start** button, then select **Power** > **Restart**.

2. After your PC restarts, open just the apps you need, then close them when you're done.

Sometimes apps that were made for an earlier version of Windows will still run on Windows 10, but they might slow down your PC. If this happens after you open a certain program, check the software company's website for an updated version, or run the Program Compatibility Troubleshooter.

To run the Program Compatibility Troubleshooter

1. In the search box on the taskbar, type **troubleshoot**, then select **Troubleshoot settings**, which has System settings listed underneath it.

2. In the list of troubleshooters, select **Program Compatibility Troubleshooter** > **Run the troubleshooter**.

3. Select the program that you're having problems with, then select **Next** and continue through the troubleshooter.

PC still running slowly? Continue to the next tip.

3. Use ReadyBoost to help improve performance

ReadyBoost lets you use a removable drive, like a USB flash drive, to improve your PC's performance without opening your PC and adding more memory (RAM). To use ReadyBoost, you'll need a USB flash drive or a memory card that has at least 500 MB free and a high data transfer rate.

To use ReadyBoost

1. Insert the USB flash drive into a USB port on your PC.

2. Select **File Explorer** from the taskbar.

3. Press and hold (or right-click) the USB flash drive (or SD card if you used one instead), then select **Properties**.

4. Select the **ReadyBoost** tab, then select **Use this device**.
   Windows determines if the device can use ReadyBoost. If it can't, it'll let you know.

5. After Windows determines how much free space to use to optimize memory, select **OK** to reserve this space so ReadyBoost can use it.

   When you look at the contents of the USB flash drive in File Explorer, you'll see a

file named ReadyBoost.sfcache on the flash drive. This file shows how much space is reserved for ReadyBoost.

4. Make sure the system is managing the page file size

The paging file is an area on your hard disk that Windows uses like memory. There's a setting in Windows 10 that manages the page file size automatically, which can help improve your PC's performance.

To make sure automatic page file management is turned on

1. In the search box on the taskbar, type **advanced system**, and then select **View advanced system settings**, which has Control panel listed underneath it.

2. In System Properties, select the **Advanced** tab, then select **Settings** in the Performance area.

3. In Performance Options, select the **Advanced** tab, then select **Change** in the Virtual memory area.

4. Make sure the **Automatically manage paging file size for all drives** check box is selected. If it is, continue to the next tip. If it's not, select it and then restart your PC by selecting the **Start** button > **Power** > **Restart**.

Use your PC and see if it's running better. If it's not, try the next tip.

5. Check for low disk space and free up space

You may improve performance if you free some disk space on your PC.

To check for low disk space

1. Select the **Start** button, then select **Settings** > **System** > **Storage** .
   Open Storage settings

2. Your drives will be listed in the Storage area. Note the amount of free space and total size for each drive.

You can use Storage Sense to delete unnecessary or temporary files from your device, which can also free up space.

If you turn on Storage Sense, Windows will automatically free up space by getting rid of unnecessary files—including files in your recycle bin—when you're low on disk space or at intervals you specify. The instructions below show you how to delete temporary files and how to turn on and configure Storage Sense.

If you can't find Storage Sense on your device using the following steps, see the "Free up space with Disk cleanup" section below instead.

Note

You may not want to delete temporary files to improve performance. While these files may not be used at the moment, they help your apps load and run faster.

To delete temporary files with Storage Sense

1. Select the **Start** button, then select **Settings** > **System** > **Storage** .
   Open Storage settings

2. Select **Temporary files** in the storage breakdown. **Note**: If you don't see Temporary files listed, select **Show more categories**.

3. Windows will take a few moments to determine what files and apps are taking up the most space on your PC.

4. Select the items you want to delete, and then select **Remove files**.

To see what's in your Recycle Bin before you empty it, open it from your desktop. If you don't see the Recycle Bin icon on your desktop, in the search bar on the taskbar, type **recycle bin**, then select **Recycle Bin** from the list of results.

Note

Windows moves files you delete to the Recycle Bin in case you change your mind and need them again in the future. You might be able to free up a significant amount of space by deleting Recycle Bin files to *permanently* remove files you've previously deleted.

To turn on and configure Storage Sense

1. Select the **Start** button, then select **Settings** > **System** > **Storage** .
   Open Storage settings

2. In the Storage area, turn on **Storage Sense**.

3. Select **Configure Storage Sense or run it now**.

4. In the Storage Sense area, choose how often you want Storage Sense to run.

5. In the Temporary Files area, select **Delete temporary files that my apps aren't using**.

6. Select which files you want Storage Sense to delete (your choices are files in your Recycle Bin and in your Downloads folder), then select the corresponding time intervals.

7. Scroll down and select **Clean now**.

8. Windows will take a few moment to clean up your files, and then you'll see a message indicating how much disk space has been freed up.

If your system doesn't have Storage Sense, you can use the Disk Cleanup tool to delete temporary files and system files from your device.

To run Disk Cleanup

1. In the search box on the taskbar, type **disk cleanup**, then select **Disk Cleanup** from the list of results.

2. Select the checkbox next to the type of files you want to delete. (To view a description of each type of file, select the name.) By default, **Downloaded Program Files**, **Temporary Internet Files**, and **Thumbnails** are selected. Be sure to clear those check boxes if you don't want to delete those files.

3. To free up even more space, select **Clean up system files**. **Disk Cleanup** will take a few moments to calculate the amount of space that a can be freed up.

> Note
>
> If it's been fewer than 10 days since you upgraded to Windows 10, your previous version of Windows will be listed as a system file you can delete. If you need to free up drive space, you can delete it, but keep in mind that you'll be deleting your Windows.old folder, which contains files that give you the option to go back to your previous version of Windows. If you delete your previous version of Windows, this can't be undone. (You won't be able to go back to your previous version of Windows.)

4. Select the types of files you want to delete, select **OK**, then select **Delete files** in the confirmation window to start the cleanup.

If your PC still runs slowly, try uninstalling apps you don't use anymore.

To uninstall apps you don't use anymore

1. Select the **Start** button, then select **Settings** > **Apps** > **Apps & features**.
   Open Apps & features settings

2. Search for a specific app or sort them to see which ones are using the most space.

3. When you find an app to remove, choose it from the list and select **Uninstall**.

4. Restart your PC and and see if performance has improved.

If your PC still runs slowly, try moving files to another drive.

If you have photos, music, or other files that you want to keep but don't use often, consider saving them to removable media, like a USB drive. You'll still be able to use them when the drive is connected, but they won't take up space on your PC.

To move files to another drive

1. Connect the removable media to your PC.

2. Select **File Explorer** from the taskbar and find the files you want to move.

3. Select the files, go to **Home**, then select **Move to** > **Choose location**.

4. Select your removable media from the location list, then select **Move**.

5. Restart your PC and see if performance has improved.

Get more info about freeing drive space in Windows 10.

If your PC still runs slowly, try the next tip.

6. Adjust the appearance and performance of Windows

Windows 10 includes many visual effects, such as animations and shadow effects. These look great, but they can also use additional system resources and can slow down your PC. This is especially true if you have a PC with a smaller amount of memory (RAM).

To adjust the visual effects in Windows

1. In the search box on the taskbar, type **performance**, then select **Adjust the appearance and performance of Windows** in the list of results.

2. On the **Visual Effects** tab, select **Adjust for best performance** > **Apply**.

3. Restart your PC and see if that speeds up your PC.

If your PC still runs slowly, continue to the next tip.

7. Pause OneDrive syncing

Your PC settings let you choose where files will be saved by default. You can save files on your PC or to OneDrive by default and sync files between the two locations. This lets you get to your files from any device that can connect to the internet, and it helps make sure your files are backed up in case your PC is ever damaged or lost. However, files must sync between your PC and OneDrive, and syncing can slow down your PC. You can pause OneDrive syncing temporarily and see if it helps improve your PC performance.

To stop syncing to OneDrive

1. On the taskbar, look for **OneDrive** near the notification area.
2. Select **OneDrive** > **More** > **Pause syncing**, and then choose how long you want to pause syncing your files.
3. Restart your PC and see if your performance issues have improved with syncing paused.
4. To resume syncing your files, select **OneDrive** > **More** > **Resume syncing**.

You can also visit Fix OneDrive sync problems to check for any sync issues.

Note

If you have Window 10 version 1709 or higher, you can use OneDrive Files On-Demand to choose which files you want to sync and always keep on your PC. This can help improve PC performance if you reduce the number of files that are synced to your PC. To see which version of Windows 10 your device is currently running, select the Start button, then select **Settings** > **System** > **About**.
Open About settings

For more info on OneDrive Files On-Demand, see Learn about OneDrive Files On-Demand.

8. Disable unnecessary startup programs

When you turn on your PC, some programs start automatically and run in the background. You can disable these programs so they don't run when your PC starts.

Many programs are designed to start automatically when Windows does. You don't realize they're running, but they'll open quickly when you go to use them. This is helpful for programs you use a lot, but not for programs you don't use often because it increases the time it takes Windows to start.

Find the programs that start automatically

Sometimes you can determine which programs start automatically by looking at the program icons in the notification area on the far right of the taskbar. Check there first to see if there are any programs running that you don't want to start automatically. To try to find out the name of the program, point to the icon with your mouse pointer. Make sure you select **Show hidden icons** , so you don't miss any programs.

Notification area with mouse pointing to show hidden icons

Even after you check the notification area, you might still miss some programs that run automatically at startup. Here's how you can find all the programs that start automatically, and stop the ones that you don't want to start automatically when Windows starts.

To stop a program from starting automatically

1. Select the **Start** button, then select **Settings** > **Apps** > **Startup** .
   Open Startup Apps settings
2. In the **Startup Apps** area, find the program you want to stop from starting automatically and set it to **Off**.

Notes

- If you turn off a program and it continues to start automatically when Windows starts, you should scan for viruses and malware. See the next section for more info.

- To use the procedure above to stop a program from starting automatically, you need to have Windows 10 (Version 1803 or higher) installed. To see which version of Windows 10 your device is currently running, select the **Start** button, then select **Settings** > **System** > **About**.
  Open About settings

- If you have Windows 10 (Version 1709 or earlier) installed, press **Ctrl** + **Alt** + **Delete**, select **Task Manager**, select **Startup**, select the program you want to stop from starting automatically, then select **Disable**.

9. Check for and remove viruses and malware

A virus, malware, or malicious software could cause your PC to run slowly. Other symptoms include unexpected pop-up messages, programs that unexpectedly start automatically, or the sound of your hard disk constantly working.

The best way to handle viruses and malicious software is to try to prevent them by running antimalware and antivirus software and keeping it up to date. However, even if you take precautions, your PC can still become infected.

You can scan your PC for viruses or other malicious software by using Windows Security (formerly Windows Defender Security Center), which is included in Windows 10. For more info, see How to protect your Windows 10 PC.

Notes

- If you're using other antivirus or anti-malware software, see the documentation for that program to learn how to scan for viruses. Also, make sure multiple antivirus programs aren't running at the same time. If they are, choose the one you want to run, and then disable or uninstall any others.

- If you have another antivirus program installed and turned on, Windows Security will be turned off by default.

To scan for viruses using Windows Security (Windows 10 Version 1809 or later)

1. Select **Start** > **Settings** > **Update & Security** > **Windows Security** and then select **Open Windows Security**.
   Open Windows Security settings

2. Select **Virus & threat protection**, then select **Check for updates** under **Virus & threat protection updates**.

3. On the **Protection updates** screen, select **Check for updates** to make sure you have the most recent updates.

4. Select **Virus & threat protection**, then select **Quick scan**.

   Wait for Windows Security to finish scanning for viruses and malware.

5. Do one of the following, depending on the results of the scan:

   - Run the recommended advanced scan. This scan takes longer but searches more extensively for threats on your PC.

   - If Windows Security finds a virus or malware and can't remove or quarantine it, contact Microsoft Support for help.

   - If no viruses are found, restart your PC and try to reproduce the performance problem you were having with your PC.

To scan for viruses using Windows Defender Security Center (Windows 10 Version 1803)

1. Select **Start** > **Settings** > **Update & Security** > **Windows Security** and then select **Open Windows Defender Security Center**.
   Open Windows Security settings

2. Select **Virus & threat protection**, then select **Virus & threat protection updates** > **Check for updates** to make sure you have the latest definition file.

3. Select the **Virus & threat protection** tab, then select **Scan now**.

   Wait for Windows Defender Security Center to finish scanning for viruses and malware.

4. Do one of the following, depending on the results of the scan:

   - Run the recommended advanced scan. This scan takes longer but searches more extensively for threats on your PC.

   - If Windows Defender Security Center finds a virus or malware and can't remove or quarantine it, contact Microsoft Support for help.

- If no viruses are found, restart your PC and try to reproduce the performance problem you were having with your PC.

> **Note**
>
> If Windows Defender Security Center doesn't open, can't update the definition file, or can't finish scanning for viruses, try running Windows Defender in Offline Mode, which is explained below in **To scan for malware and viruses with Windows Defender Offline (Windows 10 Version 1803)**.
>
> To see which version of Windows 10 your device is currently running, select the **Start** button, then select **Settings** > **System** > **About**.
> <mark>Open About settings</mark>

To scan for malware and viruses with Windows Defender Offline (Windows 10 Version 1809 or later)

1. Save any documents or anything else you might have open on your PC.

2. Select **Start** > **Settings** > **Update & Security** > **Windows Security** and then select **Open Windows Security**.
   <mark>Open Windows Security settings</mark>

3. Select **Virus & threat protection**, and then under **Current threats**, select **Scan options** > **Windows Defender Offline scan** > **Scan now**.

   Your PC will restart, and Windows Defender Offline will run and scan for viruses and malware. The scan might take 15 minutes or so, and your PC will restart again after that.

4. Try to reproduce the performance issue.

If your PC still runs slowly, continue to the next tip.

To scan for malware and viruses with Windows Defender Offline (Windows 10 Version 1803)

1. Save any documents or anything else you might have open on your PC.

2. Select **Start** > **Settings** > **Update & Security** > **Windows Security** and then select **Open Windows Defender Security Center**.
   <mark>Open Windows Security settings</mark>

3. Select **Virus & threat protection**, then select **Run a new advanced scan** > **Windows Defender Offline scan** > **Scan now**.

   Your PC will restart, and Windows Defender Offline will run and scan for viruses and

malware. The scan might take 15 minutes or so, and your PC will restart again after that.

4. Try to reproduce the performance issue.

If your PC still runs slowly, continue to the next tip.

10. Restore your PC from a system restore point

Restoring your PC undoes recent changes that might be causing problems. If you think a recently installed app, driver, or update for Windows could be causing problems, you might get things running normally again by restoring your PC to an earlier point, called a restore point.

Notes

- Restoring from a restore point won't affect your personal files, but it will remove apps, drivers, and updates that were installed after the restore point was created.

- System restore works for changes made in the last 7 to 14 days.

To restore your PC from a restore point

1. In the search box on the taskbar, type **restore point**, then select **Create a restore point** from the list of results.

2. On the **System Protection** tab, select **System Restore**.

3. Select **Next**, then choose the restore point related to the app, driver, or update that might be causing the problem. Then select **Next** > **Finish**.

4. Restart your PC and see if performance has improved.

If you don't see any restore points, it might be because system protection isn't turned on.

To turn on system protection

1. In the search box on the taskbar, type **restore point**, then select **Create a restore point** from the list of results.

2. On the **System Protection** tab, select **Configure**.

3. Select **Turn on system protection** > **OK**.

If your PC still runs slowly, try the next tip.

11. Turn off Windows Tips and Tricks

Windows watching what you're doing and offering advice can also make your PC run more sluggishly. So if you want to speed things up, tell Windows to stop giving you advice.

1. click the **Start** button
2. select the **Settings icon** and then go to
3. ***System > Notifications & actions***.
4. Scroll down to the **Notifications section** and
5. **uncheck** the box marked "**Get tips, tricks, and suggestions as you use Windows.**"