# WHAT YOU WILL WANT TO KNOW ABOUT LAPTOP ISSUES

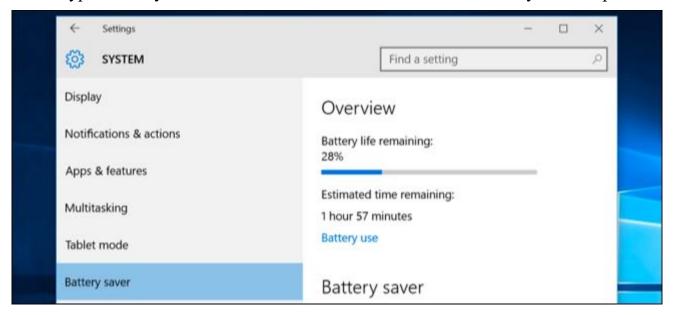
## **Controlling Battery Drain on Your Laptop or Tablet**

Windows 10 includes a new "Battery Use" screen that shows you what's draining your laptop's battery. It will tell you exactly which apps—both legacy and modern apps—are using too much power.

Note: This feature is not present in desktop computers, since they are not powered by battery.

### Find the Battery Use Screen

Go to Settings (either from the Start menu or by using Windows key + I), select "System" and then select "Battery saver." You can also type "Battery saver" into the search box and select the "Battery saver" option.

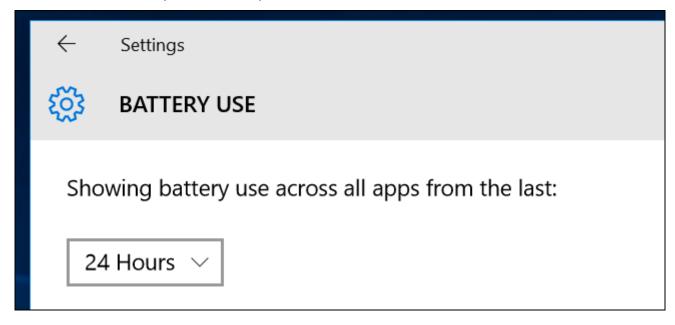


On the right side of the screen, you will see an overview that displays how much battery life you have remaining, and how much time Windows estimates you'll get from that. Click the "Battery use" link under this heading to see more details.

# **Analyze Your Power Usage**

By default, the Battery Use screen will show information from the last 24 hours. However, you can also have it show information from the last 48 hours, or from the last week.

To change this setting, click the dropdown box under "Showing battery use across all apps from the last" at the top of the screen and select "24 Hours," "48 Hours," or "1 Week."

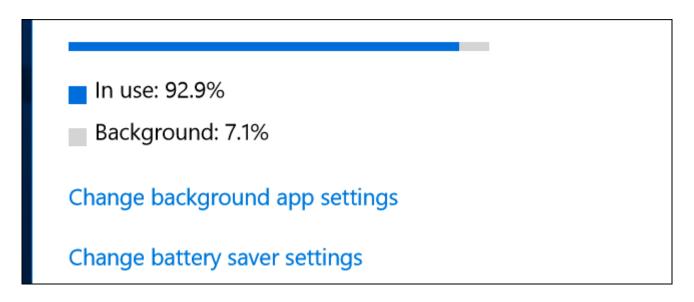


Below this box, you'll see "System," "Display," and "Wi-Fi" percentages. This shows how much battery power has been used by system processes, the display (screen), and your Wi-Fi connection.

You'll probably see that the display is using quite a bit of power. To alleviate that, try lowering your screen's brightness, or tell your display to go to sleep more often in Settings > System > Power & Sleep.

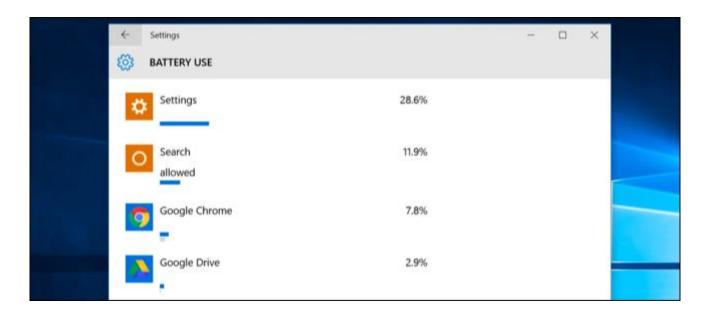
The "In use" and "Background" options show how much power is used by applications while you're using them, compared to applications running in the background.

If apps are using power in the background, you can click the "Change background app settings" link and configure apps to not run in the background. This only works for universal/modern Windows 10 apps. They won't automatically receive notifications, fetch new data for live tiles, or perform other background tasks. This can help you save battery power, especially if you don't actually use those new Windows 10 apps.



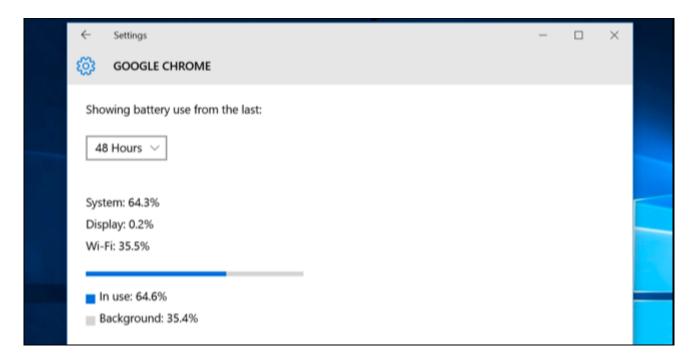
Scroll down further and you'll see a list of applications. This is the most useful part of the list, as it lists your legacy applications (Windows 7 and earlier) as well as modern apps (more recent than Windows 7). It'll display a list of the apps that have used battery power in that period, and show you what percentage of your battery power each app has used.

If an app doesn't appear in the list here, you never used it while you were on battery, so it never consumed any battery power.

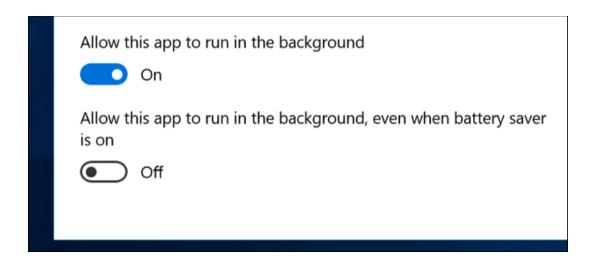


You can view more information about a specific application's energy usage by clicking it and then selecting the "Details" button. You'll be able to see what percentage of power the app used for system processes, the display, and Wi-Fi. You'll also be able to see how much power the app used while you were actively using it, and how much it used when running in the background.

As with the overview of all apps on the main screen, you can choose to view details for the last 24 hours, 48 hours, or one week. For example, here's how much battery Google Chrome used on a demonstration laptop in the past 48 hours:



You may see the word "Allowed" beneath some Windows 10 modern apps in the list. This indicates they are allowed to run in the background. You can select an app and then select the "Details" button to see more details. From here, you can disable the "Allow this app to run in the background" option and prevent the app from using power in the background.



# **How to Increase Your Laptop or Tablet's Battery Life**

There's no way around it: All applications you use will drain battery, and whatever applications you use the most will likely rank high in the list. Demanding applications—for example, PC games or video programs—will also use a lot of energy.

The Battery usage screen provides options for controlling whether Windows 10 apps can run in the background, which should help you if you're using that type of app. But there's no way to control Windows desktop apps from the Settings screen.

If a desktop application is sucking down a lot of power while running in the background, you may be able to save power by closing it when you're not using it. If an application is using a lot of power while you're using it, there's not much you can do. You could try looking for an alternative application that isn't as power hungry, or try to make the application more lightweight—for example, by uninstalling browser extensions, enabling click-to-play plug-ins, and having fewer tabs open at once in your web browser.

It's not just apps, either—plenty of other settings can affect your battery life. The display backlight uses quite a bit of power, so lowering your display brightness will help. Having your PC automatically sleep more quickly can also help if you're not in the habit of putting it to sleep when you step away.

The Battery usage screen isn't a one-stop shop for making applications use less power. However, it is a convenient way—and the only way in Windows—to see which apps are using the most power. This information doesn't even appear in the Task Manager.

With this information, you can get an idea of where your power is going and make informed decisions to help stretch your battery life.

### DISABLE YOUR TOUCHPAD WHILE TYPING

When you are typing a text on your laptop and your thumb accidentally brushes the touchpad, this contributes to an unwanted change in the position of the cursor in your document and you need to start typing again.

Some touchpads can be turned off by opening the mouse in the control panel and disabling the function.

Most laptops recognize the keyboard shortcut of either Fn + F6 or Fn + F8 to temporarily disable the touchpad. Unfortunately, this approach is not permanent and must be done after each reboot.

To find out how you can turn off the touchpad on your laptop, go to the manufacturer's Website and type *disable the touchpad* in the search or find box.

Some laptops don't have dedicated buttons but you can use Function keys (like Fn + F5 on Dell computers) to toggle the state of your touch pad. In the case of HP laptops, you can hold the top-left corner of the touchpad for a few seconds and it will disable the touch pad – repeat this to re-activate it.

New laptop computers either have a physical on/off button to easily disable the touch pad or there's an icon in the system tray that lets you manage the various settings of the touchpad. If you don't have that icon, you can go to Control Panel – > Mouse Properties – > Touch Pad to enable or disable the touchpad.

The touch pad can also be disabled through the device manager (Windows + X, then M). Expand "Mice and other Pointing devices", right-click and disable the driver entry that says Touch pad or something similar.

If none of the above solutions work for your brand of laptop, try TouchPad Pal – it's a free Windows utility that will temporarily disable the touchpad of your laptop as you go into typing mode. The utility runs in the system tray and requires no configuration.

#### SUGGESTIONS FOR EXTENDING YOUR LAPTOP'S BATTERY LIFE

It's important to understand what drains the most power in your laptop. In modern laptops, the monitor consumes about 43 per cent of normal operating power. Inside the unit, the video, graphics, audio, math coprocessor, etc. eat another 22 per cent. The central processing unit accounts for 9 per cent of power consumption, while a graphics processor takes another 8 per cent. The hard drive takes only 5 per cent, and network adapters consume only 4 per cent. So obviously, power conservation efforts should focus first on the monitor.

# How to tweak your settings to save battery power on your laptop

Microsoft Windows has a **Power Options** section (Windows + X, then O) that can help you optimize your laptop's performance with regard to the trade-off with power consumption. You can use one of the pre-defined Power Plans that will be activated depending on whether you're operating on battery or wall power. The plans control how bright the display is; when to turn off the display during periods of inactivity; when to turn off the hard drive to save power; and what CPU performance level to use when on battery power. Tweaking these plans to fit your computing habits and performance needs can extend battery life significantly.

You can also **manually adjust the display brightness** to suit the environment; you don't really need the brightest setting in a dim family room or den. On most laptops, you can change the screen brightness by holding down the **Fn** button and pressing one of the function keys on the top row of the keyboard. On a Toshiba laptop, for example, Fn+F6 reduces the brightness, and Fn+F7 will make it brighter. On Lenovo laptops, it's the up arrow and down arrow. When power is low, turn it down as much as possible.

To further stretch your battery time, **avoid video games, listening to music, watching videos** (especially high-resolution videos) and other graphics-intensive applications while on battery.

Turn off the wifi adapter if you don't need to access the Internet.

Don't try to charge your smart phone via the laptop's USB, if your computer's battery life is dwindling.