

How to See Which Apps Are Draining Your Battery on an Android Phone or Tablet



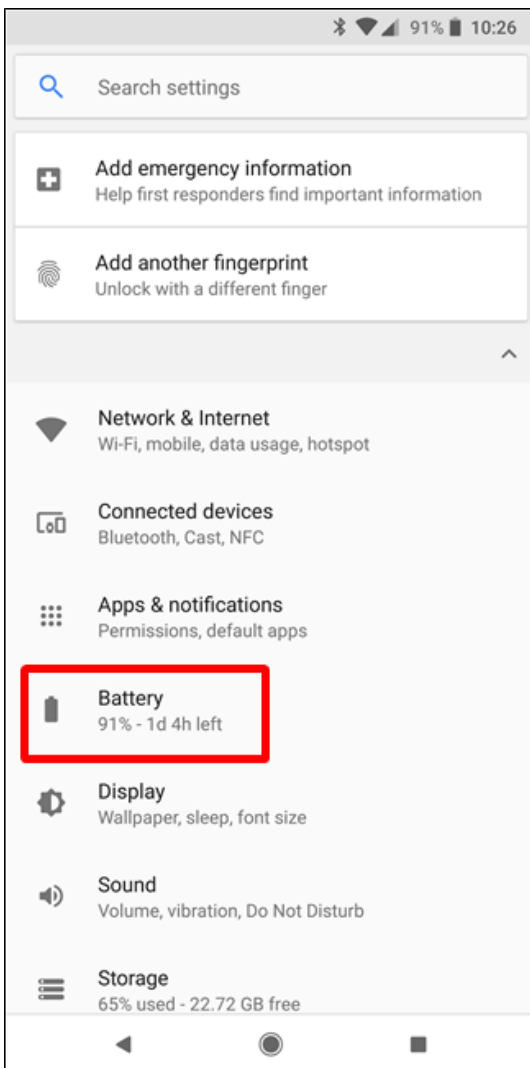
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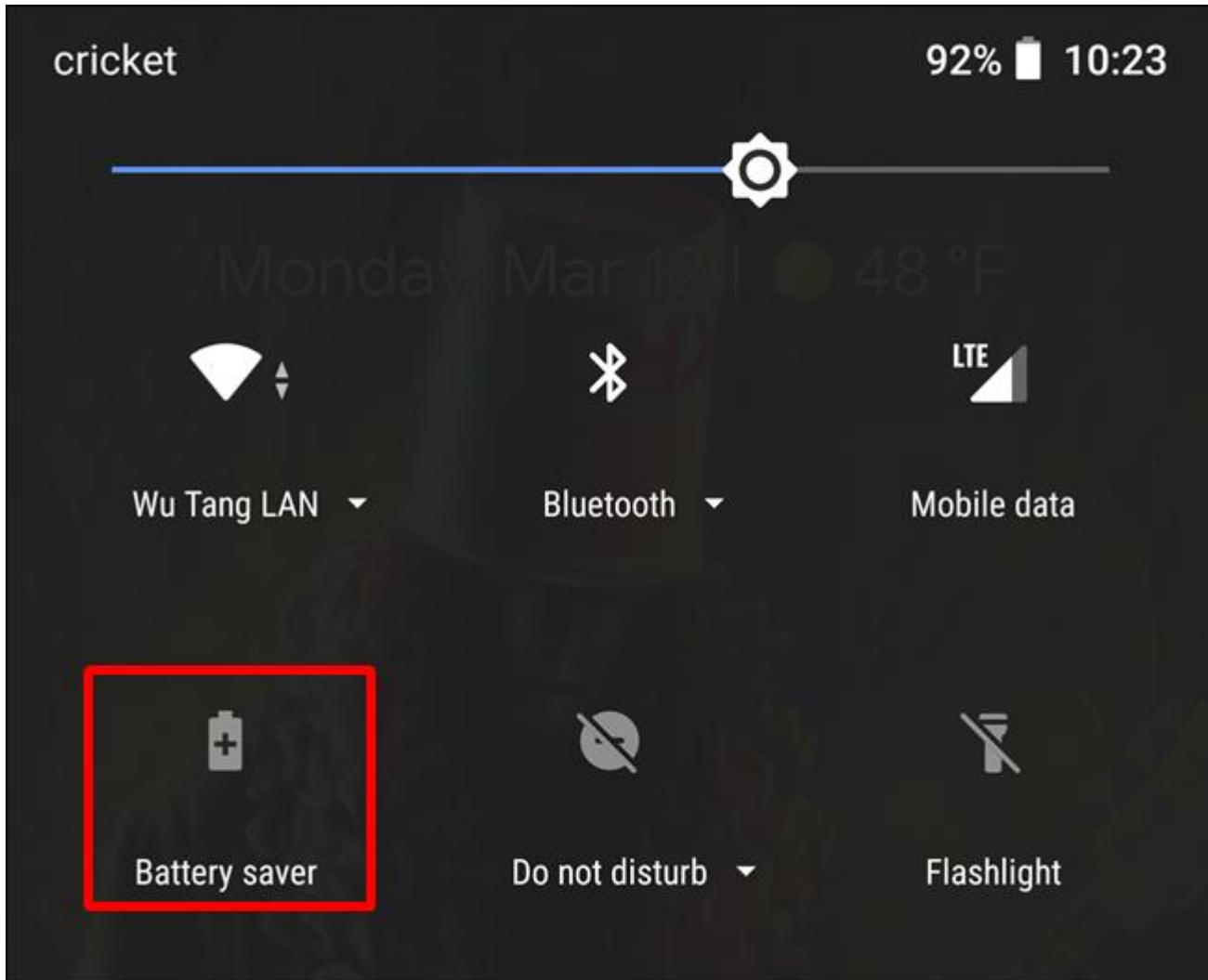
If your Android phone's battery always feels a little low, you can find out exactly where that power is going. Android's Battery screen shows you what's used battery power since your last charge, from apps to system services and hardware devices.

How to Access the Battery Screen

Open the Settings app from your app drawer, expand the "Device" section, and then tap the "Battery" option.

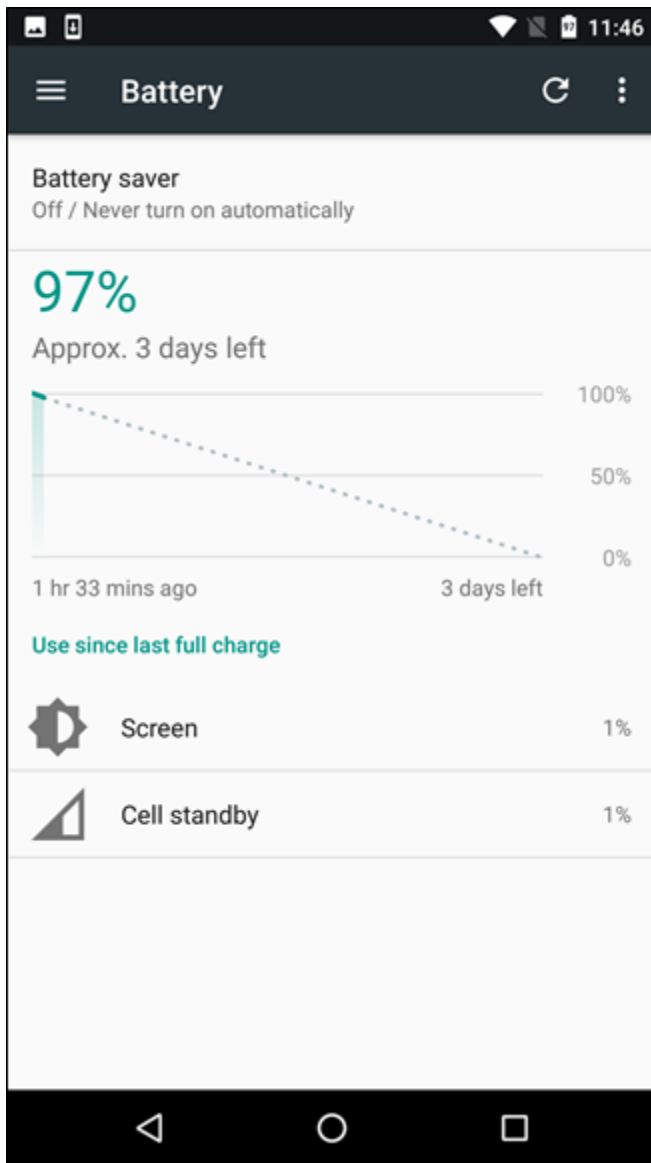


You can also pull down the Quick Settings panel in the notifications shade and long-press the battery icon (or Battery Saver on Oreo devices) to go straight to this screen.

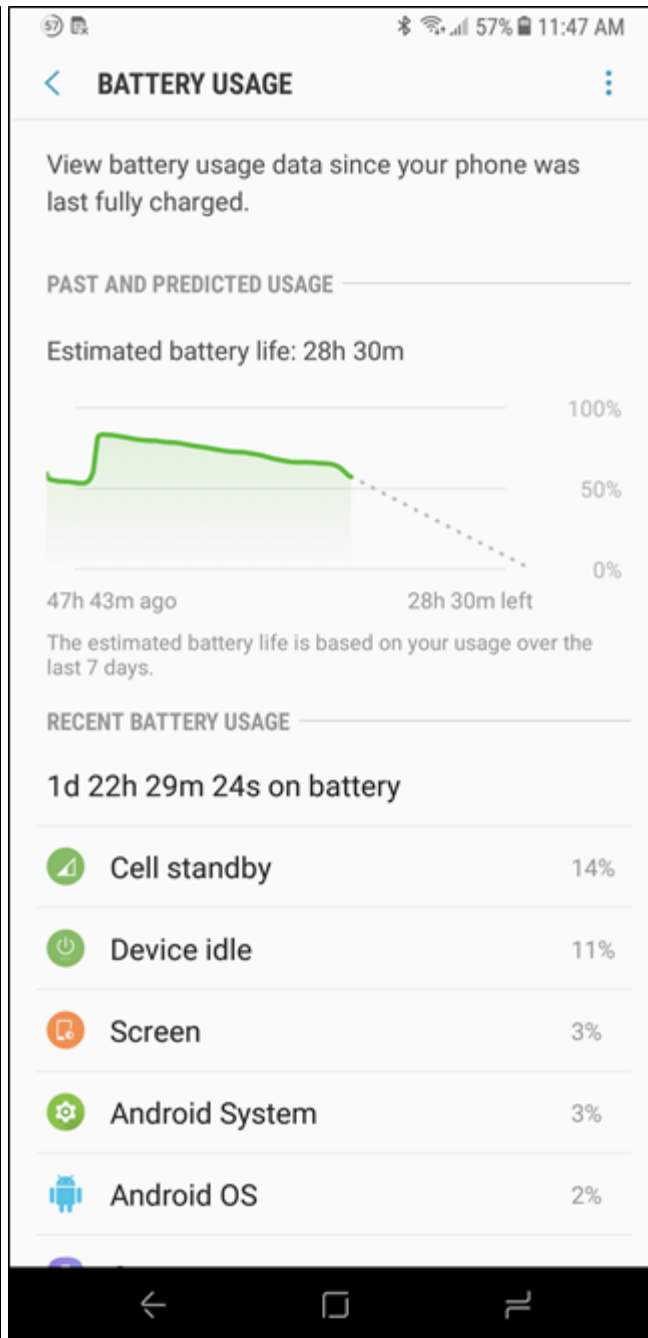
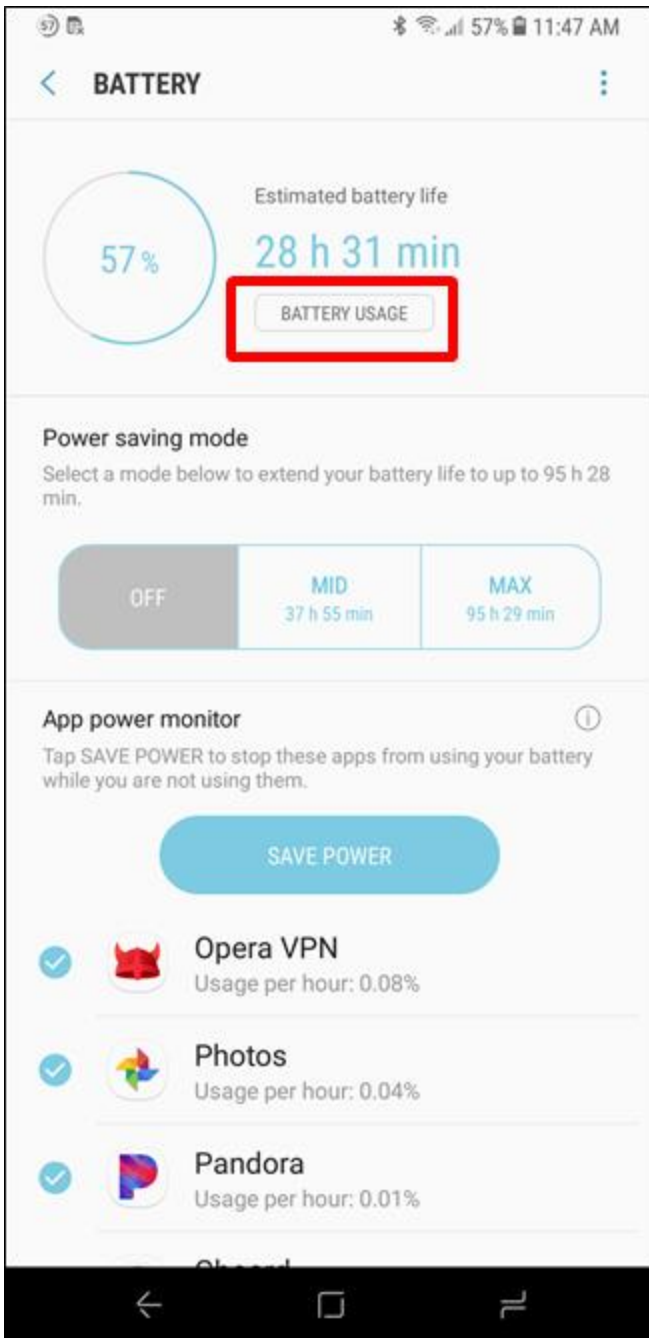


The Battery screen only shows battery usage since the last full charge. If you've just recently charged your phone or tablet, it won't be very helpful. Ideally, you'll want to check this screen when your device is fairly low on battery to get an idea of what apps, hardware components, and system services actually used battery power since your last charge.

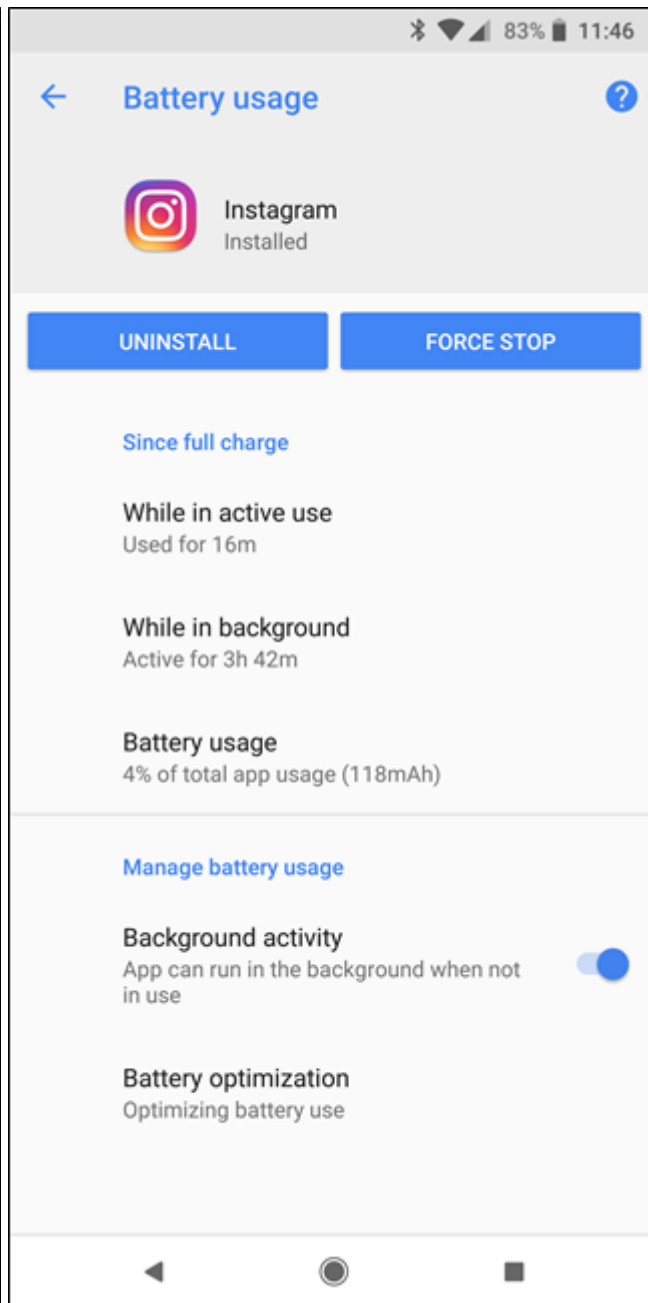
On older versions of Android (Nougat and earlier), you'll get a chart with battery discharge information, and just below that a look at what's eating up the battery. On Oreo and above, several battery settings appear above the list, so you'll need to scroll down to see it.



On Samsung devices, you'll need to tap the "Battery Usage" button in the battery menu to get a look at this list.



Assuming your device has been running for long enough, you'll get a good look at exactly what drained battery power and when it happened. You can tap an app or service to view more detailed information.



Get More Advanced Battery Stats with Third-Party Apps

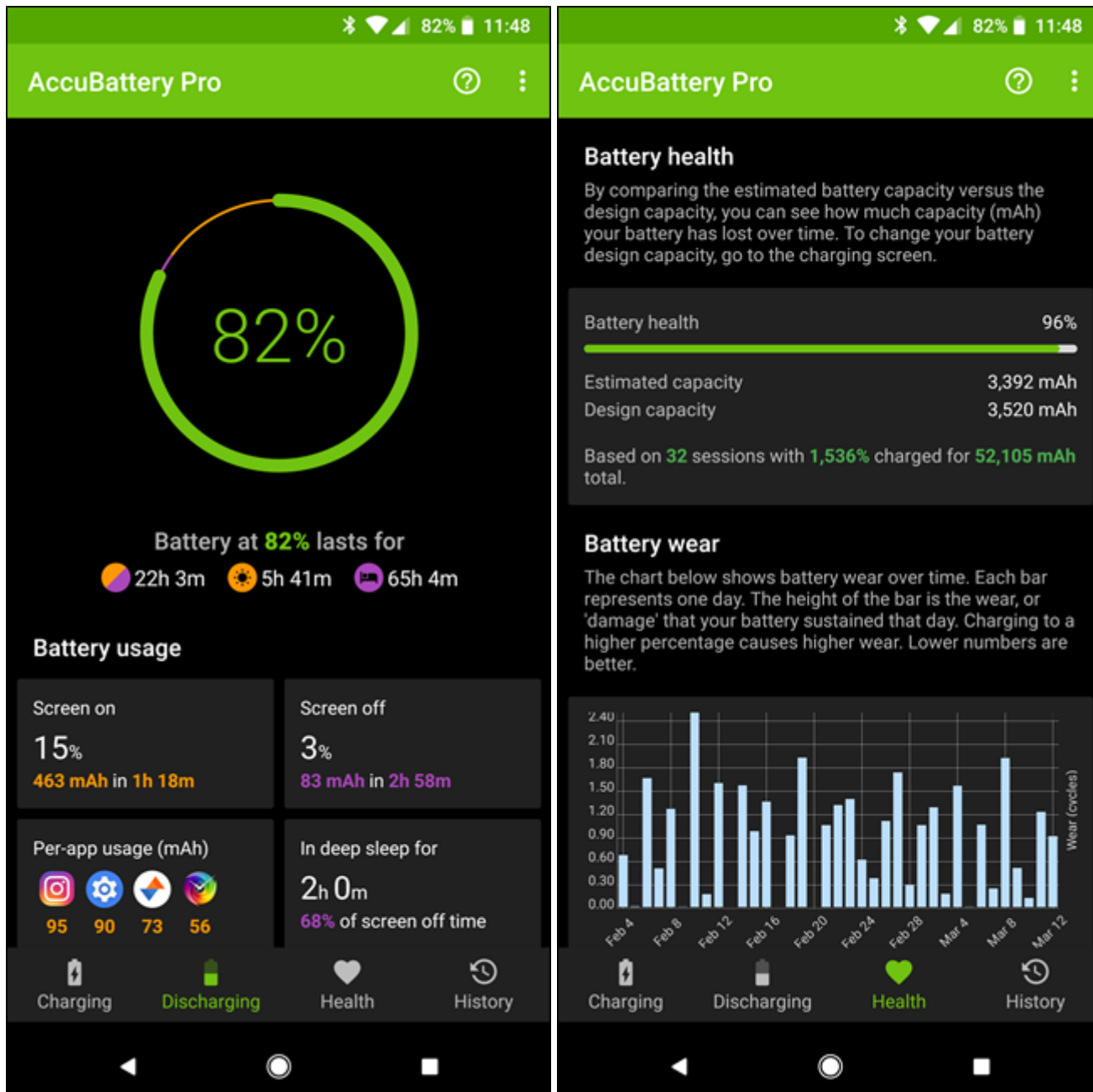
RELATED: [How to Get More Meaningful Battery Stats on Your Android Phone](#)

Android actually collects a lot more battery usage information than it displays on the Battery settings screen. Previously, it was possible for an app like [Better Battery Stats](#) to request the BATTERY_STATS permission and access this information. You could then view more detailed battery statistics. For example, you could view information about wakelocks, or view battery usage for periods of time not displayed in the Battery screen.

Unfortunately, Google [removed this permission](#) from Android and apps can no longer view it. If you've [rooted your Android device](#), you can still install an app like Better Battery Stats to view more

detailed information on battery usage. But without rooting, you're stuck with the information provided by Android's built-in Battery screen because these apps just can't see that data.

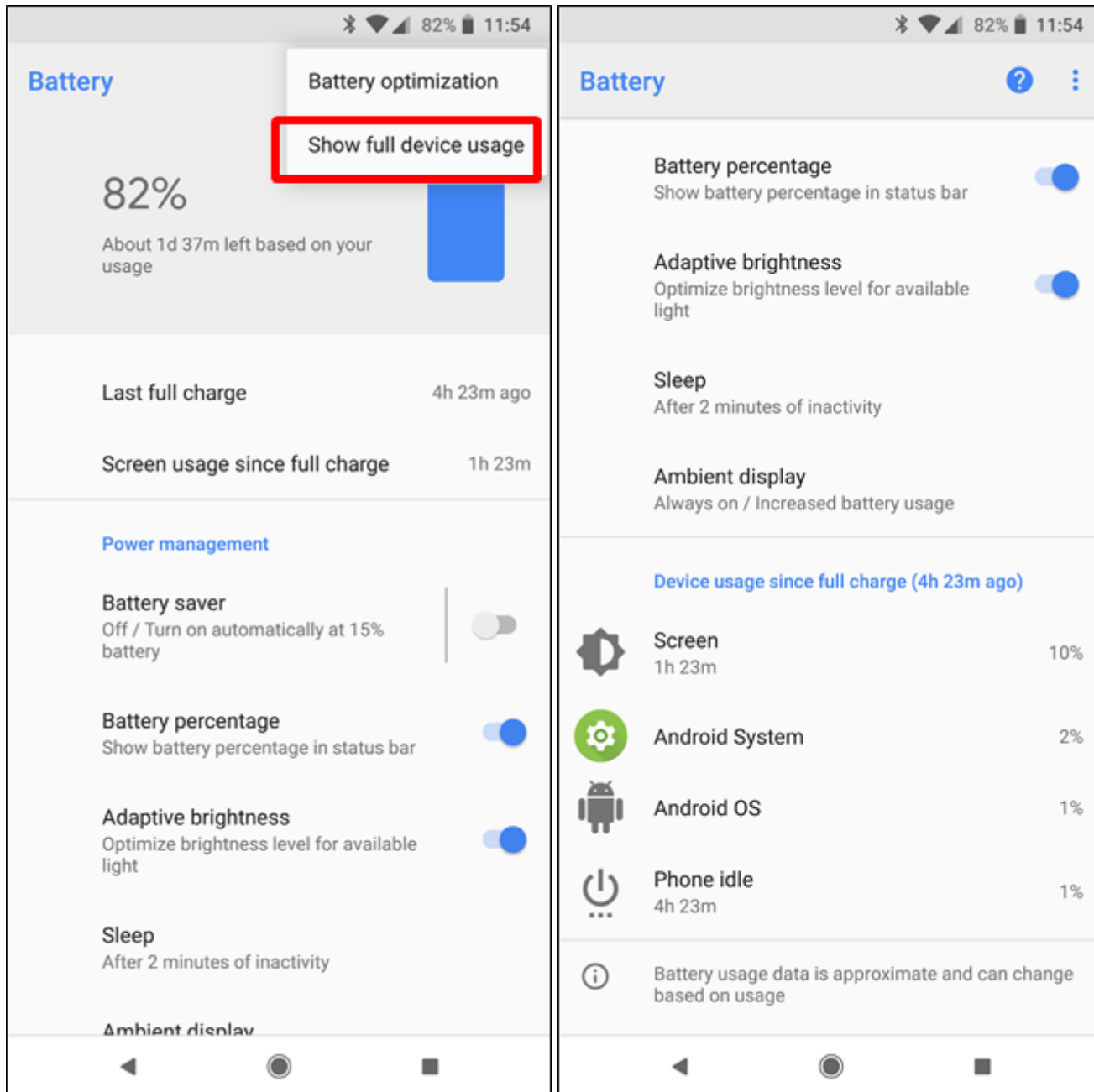
That said, there are still a few ways you can get [more meaningful battery stats on Android](#). Our preferred app for getting detailed information about your battery (without rooting) is [AccuBattery](#), which not only gives more insight into which apps are using the most battery, but also provides a detailed look into your [battery health](#). This is one of those apps that gets better and more useful as time goes on, so the more you use it, the more you'll love it.



What Are All These Hardware and System Services?

On Android Nougat and below, hardware and operating system information shows up in this list alongside any apps that are using up battery life. On Oreo, however, this extra info is separated by

default. To find it, you need to tap the menu button in the upper right corner, and then select the “Show full device usage” option. This lets you see the hardware components and OS services using up battery—just keep in mind this is a separate list, and won’t include any apps that are using battery!



You can get more information about a hardware component or service by tapping it. Apps are self-explanatory—they use battery power when you have them open, and some may also use up battery when running in the background. Here’s what all the non-app items in the list are:

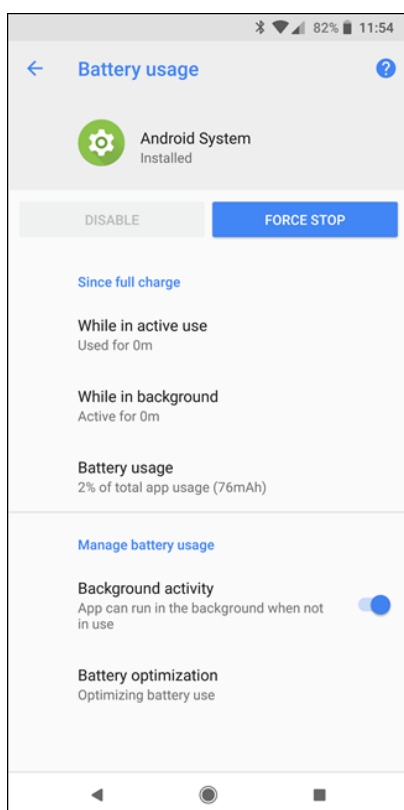
- **Screen:** This is the amount of power used by the screen and its backlight. Your screen always uses a significant amount of power. You can reduce the usage a bit by lowering your screen brightness and configuring Android to turn the screen off when you’re not using it.
- **Wi-Fi:** This shows amount of power used by your device’s Wi-Fi radio. It always uses some amount of power when you’re connected to Wi-Fi, and even when you’re not connected as it searches for

available connections. You could save some power by disabling WI-Fi when you're not using a Wi-Fi network.

- **Cell Standby:** Assuming you're using a device with a cellular connection, that cellular radio is always using some power. If you have a weak cellular signal, this could result in higher power usage.
- **Android OS:** This accounts for all the battery power used by the underlying Android operating system, which manages your running processes, interfaces with your hardware, and does all that low-level stuff.
- **Android System:** Despite the name, this is separate from the Android operating system itself. It represents the battery power used by things like the Settings app, input devices, and various other system services. You could make it use a bit less battery power by enabling [battery saver mode](#).

RELATED: [What Is Google Play Services, and Why Is It Draining My Battery?](#)

- **Google Play Services:** This [includes a variety of services](#), including [Google Play Services](#), the Google account manager, Google services framework, and Google backup transport. This is just another package of services used by your Android device. Battery saver mode can reduce power used by these background processes, too.
- **Phone idle or Tablet idle:** Your Android device uses some amount of power just because it's on, even if it's completely idle in a low-power state.
- **Users:** If you have multiple user accounts set up on your Android phone or tablet, you'll see a separate "User" item for each user here. This helps you understand how much other user accounts contributed to your battery usage.



How to Save Battery on Your Android Phone

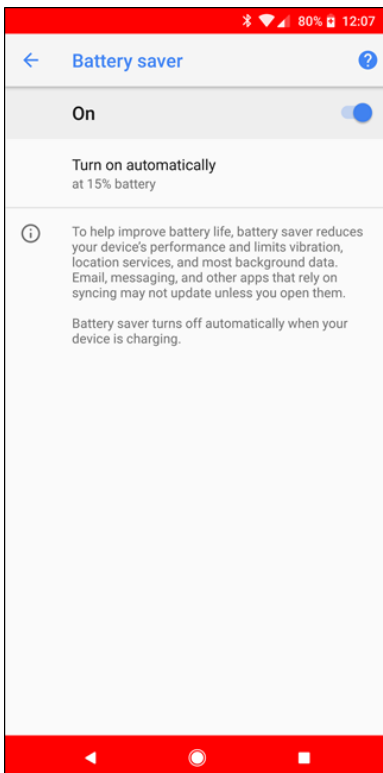
RELATED: [How Android's "Doze" Improves Your Battery Life, and How to Tweak It](#)

You probably already know that you can lower your screen brightness and disable Wi-Fi and Bluetooth when you aren't using them, but there's a lot more you can do beyond those simple tricks.

If the Battery screen shows that an app is using a lot of battery power, you may want to remove or replace it. Apps definitely appear on your Battery screen if you actually use them, but some apps are heavier power users than others—for example, a demanding 3D game uses more battery power than the average app. Some apps also run in the background and use power even when you aren't actively using them. It's not possible to entirely prevent apps from running in the background, but you may be able to disable background operations within an app's settings. If not, you could uninstall or [disable the app](#), and use an alternative. For example, instead of the power-hungry Facebook app, you could use [Facebook's battery-friendly mobile site](#).

If your phone is running Android Oreo, it will let you know when an app is running in the background and using up battery. If you don't like this feature, you can [disable it pretty easily](#), but it can also be quite handy for keeping an eye on apps that become unruly.

Other Android features can also help you save power. [Battery saver mode](#) puts your device into a more conservative state where less background work will be allowed, and you can have your phone automatically enable it for you. Doze helps save power when you aren't using your phone or moving it around, and you can [make Doze even more powerful](#).



The Battery screen show you where your battery power went, but it's up to you to do something with that information. It's a good starting point when you want to start saving battery power, but Google has unfortunately limited access to more detailed battery usage information. Still, the included Battery screen should be more than enough information for Android users who aren't geeks. It's just be nice to have access to information from more time periods, especially if you've recently charged your device. For example, battery usage data from the last 24 hours would be helpful.

Similar features are available on [Microsoft's Windows 10](#), Apple's [iPhones and iPads](#), and [Mac OS X](#). You can see exactly what's been using battery power and make informed decisions to help prolong your battery life.



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Chris Hoffman is Editor in Chief of How-To Geek. He's written about technology for nearly a decade and was a PCWorld columnist for two years. Since 2011, Chris has written over 2,000 articles that have been read more than 500 million times--and that's just here at How-To Geek. [READ FULL BIO »](#)



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