How many tabs does it take to slow down your browser?

Maybe because of habit or work needs, we often have to open dozens of different tabs on the web browser of our computers and phones.

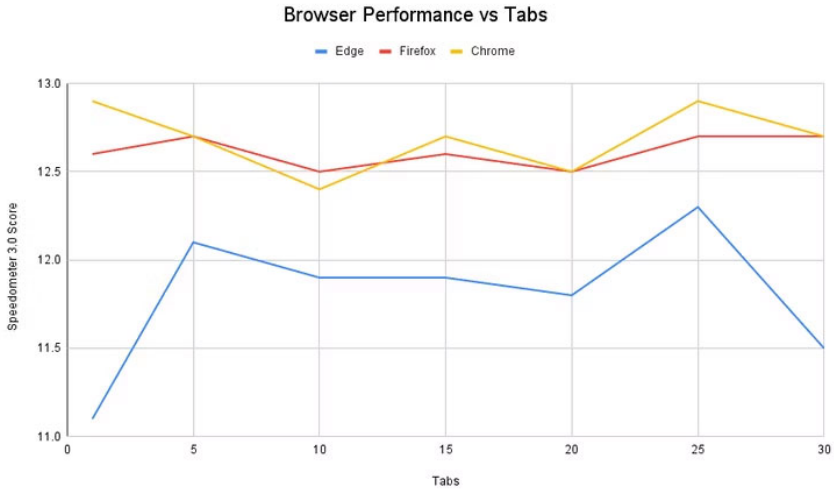
Maybe because of habit or work needs, we often have to open dozens of different tabs on the web browser of our computers and phones. But how long do you usually keep your browser tabs open? Have you ever wondered how many tabs your browser can handle at the same time before it starts to suffer from performance degradation?

It seems reasonable to assume that the more tabs you have open, the harder your browser will work. In other words, many people believe that browser performance will be negatively affected if you constantly have dozens of resource-hungry tabs. However, that view is not necessarily correct. Modern browsers possess some interesting tricks to overcome such situations.

To test the effectiveness of Chrome, Firefox, and Edge's memory management, you can use browser performance tools such as Speedometer 3.0. There are a lot of variables at play in a test like this—mainly from the specs of your computer and the website you open. To keep things as consistent as possible, you should open five different websites, run the test, reopen the same five tabs, run the test, and repeat until you have about 30 tabs open.

In the example referenced in this article, the test PC runs Windows 11, 16GB of RAM, Ryzen 5 3600 CPU and 500GB of storage. Reference browsers are Chrome, Firefox and Edge, all at default settings. The specific score will not be important in the test results — the most important factor to pay attention to is stability and consistency when opening multiple tabs.

The results show that all three browsers operate quite stably even though there are many tabs open at the same time. The chart below shows Speedometer 3.0 scores for an increasing number of open tabs (starting with one tab as the baseline).



Microsoft Edge has the biggest score difference, but you'll notice that the browser's performance doesn't generally get worse as more tabs are opened. Oddly, the two worst scores were at opposite ends of the spectrum—1 tab and 30 tabs. That shows the number of tabs essentially has very little impact on performance.

Firefox and Chrome performed more consistently, and again, browser performance scores didn't seem to show any correlation with tab count. Both browsers scored very similarly for opening just one tab and 30 tabs. All of these results—including Edge—show that you can open more tabs and browser performance will remain stable.

However, what happens if you turn off your browser's memory and performance saving features? For example, when turning off all options in Edge's "Optimize performance" settings and running the test again with 30 tabs open, the score was 10.9, which is still not a huge difference. .

In general, modern web browsers have built-in features to ensure that performance is not affected when you have too many tabs open. As mentioned above, Chrome, Firefox, and Edge all have some "Save memory" or "Optimize performance" features that help free up memory in the background. These features can be enabled or disabled, but in some cases are integrated into the core of the browser.

This concept is very similar to how iPhone and Android devices manage memory. Contrary to what you might think, you don't need to close background apps on your phone. If you don't use an app for a while, it will be put to sleep in the background. The same applies to browsers.