A Principled Technologies report: Hands-on testing. Real-world results.



Browse faster with Microsoft Edge

On average, Microsoft Edge loaded pages faster than Google Chrome and Mozilla Firefox

Browser speed is key to ensuring users have good experiences when surfing the web. Each little lag when loading a page can be an annoying distraction.

Microsoft[®] commissioned Principled Technologies to compare how Microsoft Edge would perform against two other popular browsers—Google Chrome[™] and Mozilla[®] Firefox[®]—on real-world websites, not just theoretical benchmark tests. We tested two sets of popular sites: the top 100 U.S. sites and the top 100 global sites (as reported by Alexa and excluding porn sites, ad promoters, and 404s) to make sure our experiences would reflect those of web users worldwide. We found that Microsoft Edge loaded the majority of websites faster than the other browsers.^{*}

That means that with Microsoft Edge, users can get the information they want faster, and may be able to use their extra time to do more throughout the day.

69% of the top 100 US sites and for the top

faster than Mozilla Firefox

*In this report, we present the average of initial page loads and refreshes for the sites.

What page loads mean and how to test browser responsiveness

Page load times—both initial page loads and subsequent refreshes of pages you visit often—heavily affect the experience you have when you check your email, visit social media, or check the daily news. With so many developments in browser technology, it can be hard to determine which may work fastest for you. That's why PT put Microsoft Edge, Google Chrome, and Mozilla Firefox to the test.

When you're testing browser performance, several factors can influence the results. PT guarded against these variables by testing in a rigorous, scientific manner. We set up three identically configured laptops side by side. Because we always take the average of three runs to avoid outlier results, three different testers simultaneously hand-timed how long it took each of them to access the same website on three separate, identically configured laptops running the same browsers. Once testing was done, we recorded and averaged three page loads. After we recorded initial page load times, we refreshed the sites and recorded that data, again averaging three refresh page loads. This way, we could minimize factors such as network differences or slight differences in hardware in our results. In total, we loaded and refreshed 200 sites: the top 100 U.S. and top 100 global sites (excluding porn sites, 404s, and ad promoters) as reported by Alexa on 10/19/2016. To learn more about our testing, see Appendix B. For complete lists of the sites we loaded, see Appendix C and Appendix D.





Small delays matter

Seconds or fractions of a second may seem small, but most people who have used a sluggish browser recognize that slight feeling of frustration when a page takes slightly longer to load. That's because, according to usability studies, one tenth of a second is the limit for a user to feel like a system reacts instantaneously, and users' thoughts start to wander after only a single second. Because users can feel these delays when browsing the web, it stands to reason that a faster browser can make for a more pleasant user experience. See www.nngroup. com/articles/response-times-3-important-limits/ to learn more.

Faster page loads for popular U.S. sites

Microsoft Edge loaded 57 percent of the top U.S. websites faster than Chrome and 69 percent of the top U.S. websites faster than Firefox. Average page load times (taking the average of initial and refresh times together for all 100 sites) were faster on Microsoft Edge: 2.4 seconds on average compared to 2.7 for Chrome and 3.0 for Firefox. To see our detailed findings for each website, visit Appendix C.

This means that if you use Microsoft Edge to access websites throughout the day, you should be able to get to your information a little faster—time that can really add up.



U.S. average page load times (seconds)

Users around the globe can load pages faster, too

What if you live outside of the U.S.? How would your browser fare when accessing your favorite sites? Microsoft Edge loaded 64 percent of the top global websites faster than Chrome and 76 percent of the top global websites faster than Firefox. Average page load times (taking the average initial and refresh times together for all 100 sites) were faster on Microsoft Edge: 2.3 seconds on average compared to 2.6 for Chrome and 2.8 for Firefox. To see our detailed findings for each website, visit Appendix D.

These results show that no matter where you live, work, and play, using Microsoft Edge may be able to access your favorite sites quicker than competitors.



Global average page load times (seconds)



Conclusion: Faster page loads mean a better browser experience

The browser you use is important. You use the internet for fun, to learn more about the world, and to get work done. By reducing any palpable lag while browsing, you could get important time back and have a better overall browsing experience. We found that on average, Microsoft Edge loaded the most popular pages in the U.S. and around the globe faster than Google Chrome and Mozilla Firefox did.

Find the details of our testing at http://facts.pt/fBpw7Y. ►





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