



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.

Microsoft Edge loaded up to

69% of the top 100 U.S. sites and **76%** of the top 100 global sites faster than Mozilla Firefox.

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

Download now with Microsoft Edge. Photo: iStock.com

The science behind the report: Browse faster with Microsoft Edge

On September 25, 2016, we finalized the hardware and software configurations we tested. Updates for current and recently released hardware and software appear often, so unavoidably these configurations may not represent the latest versions available when this report appears. For older systems, we chose configurations representative of typical purchases of those systems. We concluded hands-on testing on November 8, 2016.

Appendix A: What we tested

We tested the following browsers on three identical laptops:

- Microsoft Edge 38.14393.0.0
- Google Chrome 54.0.2840.87
- Mozilla Firefox 49.0.2

System	Dell™ Inspiron™ 15 7579
Processor	
Vendor	Intel®
Name	Core™ i5
Model number	7200U
Core frequency (GHz)	2.5
Number of cores	2
Cache	3MB L3
Memory	
Amount	8GB
Type	DDR4
Speed (MHz)	2,400

System	Dell™ Inspiron™ 15 7579
Integrated graphics	
Vendor	Intel
Model number	HD Graphics 620
Connectivity/expansion	
Wireless internet	Intel Dual Band Wireless-AC 3165
Bluetooth	4.2
USB	1 x 2.0, 1 x 3.0 (with Power Share), 1 x USB Type C
Video	1 x HDMI
Battery	
Type	Lithium-Ion
Size	Integrated
Rated capacity	42 Wh
Display	
Size	15.6"
Type	LED-Backlit with IPS Truelife
Resolution	1,920 x 1,080
Touchscreen	Yes
Operating system	
Vendor	Microsoft
Name	Windows® 10 Home
Build number or version	10.0 (Build 14393)
BIOS	
BIOS name and version	Dell 01.00.03 (07/20/2016)
Dimensions	
Height	0.80"
Width	15.04"
Depth	9.96"
Weight	5.84 pounds

Appendix B: How we tested

Picking the 100 top U.S. and global websites

1. On 10/19/2016 we visited <http://www.alexa.com/topsites> to view the top 500 sites on the web globally and <http://www.alexa.com/topsites/countries/US> to view the top 500 sites in the United States.
2. We took the top 100 sites from each of these lists, and removed the following from each list:
 - a. Porn
 - b. Ad promoters
 - c. 404s
3. For each site we removed, we added one site past the 100th site, to come up with the complete list of 100 top sites, excluding those in step 2.
4. We measured initial page loads and refresh times for every site.
5. If a site qualified for (appeared in) both lists, we only tested that site one time and applied it to both lists.

Measuring page load times of the 100 top U.S. and global websites

We timed how long it took each browser to fully load and render each page, taking times for an initial visit and a page refresh, using the following procedure:

1. We used three identical laptops.
2. At each of the laptops, one tester sat with a stopwatch.
3. Each test typed in the URL of the site under test in the same browser, and readied their stopwatch.
4. One tester counted down to zero. At zero, each tester pressed Enter and started the stopwatch. (That is, each of the three laptops loaded the same page on the same browser simultaneously, giving three page load times for the page/browser combination.)
5. The testers entered times into a spreadsheet, and calculated the variance of the three results. If the variance across the three laptops was lower than our variance threshold of 10% difference, they accepted the results and moved onto the next browser to test the same webpage. If the variance was greater than 10%, the testers reloaded that site on the same browser until variance fell within the +/- 10% threshold. This variance threshold minimized the human error factor, and the simultaneous page load minimized the possibility issues caused by network differences.
6. The testers repeated this process for each page.

The detailed test steps the testers followed to load the pages, starting from the desktop GUI, were as follows:

7. Launch the browser under test (Microsoft Edge, Mozilla Firefox, or Google Chrome).
8. Type the URL of the website to be timed into the address bar.
9. Simultaneously press Enter and start the timer.
10. Stop the timer when the web page is fully rendered. Record the initial page load result.
11. Simultaneously press the refresh button and start the timer.
12. Stop the timer when the web page is full rendered. Record the refresh results.
13. Close the test site tab.
14. Clear Browsing Data.
15. Close the browser.

Repeat steps 1 through 9 for each page load time to be collected.

Appendix C: Load times (in seconds) for top 100 U.S. sites

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Adobe.com			
Average initial page load	5.0	2.8	3.0
Average refresh page load	5.1	2.1	2.2
Combined initial and refresh loads	10.1	4.9	5.2
http://Amazon.com			
Average initial page load	1.6	4.4	4.5
Average refresh page load	1.5	1.8	2.3
Combined initial and refresh loads	3.1	6.2	6.8
http://Amazonaws.com			
Average initial page load	1.9	3.6	4.3
Average refresh page load	1.8	1.8	3.2
Combined initial and refresh loads	3.7	5.4	7.5
http://Americanexpress.com			
Average initial page load	2.4	3.5	4.6
Average refresh page load	1.7	1.9	2.1
Combined initial and refresh loads	4.1	5.4	6.7
http://Aol.com			
Average initial page load	4.7	3.7	4.8
Average refresh page load	4.7	3.1	3.8
Combined initial and refresh loads	9.4	6.8	8.6
http://Apple.com			
Average initial page load	1.5	1.5	1.6
Average refresh page load	1.4	0.8	1.1
Combined initial and refresh loads	2.9	2.3	2.7
http://Att.com			
Average initial page load	3.5	6.1	6.3
Average refresh page load	4.0	3.7	4.0
Combined initial and refresh loads	7.5	9.8	10.3
http://Baidu.com			
Average initial page load	4.3	4.1	3.8
Average refresh page load	2.3	1.2	1.7
Combined initial and refresh loads	6.6	5.3	5.5

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Bankofamerica.com			
Average initial page load	2.3	3.7	3.3
Average refresh page load	1.4	1.7	2.6
Combined initial and refresh loads	3.7	5.4	5.9
http://Bbc.com			
Average initial page load	2.7	5.6	6.4
Average refresh page load	2.4	4.2	5.1
Combined initial and refresh loads	5.1	9.8	11.5
http://Bestbuy.com			
Average initial page load	2.2	5.0	4.0
Average refresh page load	2.9	3.6	4.5
Combined initial and refresh loads	5.1	8.6	8.5
http://Bing.com			
Average initial page load	0.9	1.0	0.8
Average refresh page load	0.8	0.7	1.0
Combined initial and refresh loads	1.7	1.7	1.8
http://Blackboard.com			
Average initial page load	1.3	2.2	2.3
Average refresh page load	1.7	1.2	1.7
Combined initial and refresh loads	3.0	3.4	4.0
http://Blogspot.com			
Average initial page load	2.0	2.9	2.7
Average refresh page load	0.9	0.7	0.8
Combined initial and refresh loads	2.9	3.6	3.5
http://Businessinsider.com			
Average initial page load	2.8	1.6	1.7
Average refresh page load	5.3	1.6	2.2
Combined initial and refresh loads	8.1	3.2	3.9
http://Buzzfeed.com			
Average initial page load	2.0	3.0	4.4
Average refresh page load	1.8	1.7	2.6
Combined initial and refresh loads	3.8	4.7	7.0
http://Capitalone.com			
Average initial page load	2.9	3.4	3.5
Average refresh page load	2.2	1.9	2.1
Combined initial and refresh loads	5.1	5.3	5.6

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Chase.com			
Average initial page load	1.8	2.4	2.6
Average refresh page load	1.4	1.1	1.9
Combined initial and refresh loads	3.2	3.5	4.5
http://Citi.com			
Average initial page load	2.1	3.1	3.0
Average refresh page load	2.3	2.1	2.4
Combined initial and refresh loads	4.4	5.2	5.4
http://Cnet.com			
Average initial page load	4.8	7.0	4.4
Average refresh page load	4.5	2.4	3.5
Combined initial and refresh loads	9.3	9.4	7.9
http://Cnn.com			
Average initial page load	2.5	2.2	2.6
Average refresh page load	3.0	1.6	2.5
Combined initial and refresh loads	5.5	3.8	5.1
http://Conservativetribune.com			
Average initial page load	1.8	1.9	1.4
Average refresh page load	1.8	1.4	1.9
Combined initial and refresh loads	3.6	3.3	3.3
http://Craigslist.org			
Average initial page load	1.2	1.1	1.2
Average refresh page load	0.9	0.7	0.8
Combined initial and refresh loads	2.1	1.8	2.0
http://Dailymail.co.uk			
Average initial page load	4.0	3.4	3.7
Average refresh page load	4.7	3.3	3.8
Combined initial and refresh loads	8.7	6.7	7.5
http://Deviantart.com			
Average initial page load	2.7	2.1	2.3
Average refresh page load	2.6	1.5	2.1
Combined initial and refresh loads	5.3	3.6	4.4
http://Diply.com			
Average initial page load	1.0	1.6	1.8
Average refresh page load	1.3	1.1	1.1
Combined initial and refresh loads	2.3	2.7	2.9

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Dropbox.com			
Average initial page load	2.1	5.6	6.7
Average refresh page load	2.1	2.4	2.9
Combined initial and refresh loads	4.2	8.0	9.6
http://Ebay.com			
Average initial page load	2.1	1.8	3.4
Average refresh page load	2.2	1.3	1.6
Combined initial and refresh loads	4.3	3.1	5.0
http://Espn.com			
Average initial page load	3.2	6.5	8.0
Average refresh page load	4.2	4.3	6.1
Combined initial and refresh loads	7.4	10.8	14.1
http://Etsy.com			
Average initial page load	2.5	6.0	3.7
Average refresh page load	2.0	1.7	1.9
Combined initial and refresh loads	4.5	7.7	5.6
http://Facebook.com			
Average initial page load	1.8	2.0	2.8
Average refresh page load	1.1	0.7	1.1
Combined initial and refresh loads	2.9	2.7	3.9
http://Fivethirtyeight.com			
Average initial page load	2.6	4.8	5.1
Average refresh page load	3.1	3.1	4.2
Combined initial and refresh loads	5.7	7.9	9.3
http://Forbes.com			
Average initial page load	1.3	3.8	3.6
Average refresh page load	2.2	3.2	3.9
Combined initial and refresh loads	3.5	7.0	7.5
http://Force.com			
Average initial page load	3.3	3.9	4.6
Average refresh page load	2.8	1.9	2.2
Combined initial and refresh loads	6.1	5.8	6.8
http://Foxnews.com			
Average initial page load	3.3	5.1	8.2
Average refresh page load	3.2	7.7	6.2
Combined initial and refresh loads	6.5	12.8	14.4

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Gfycat.com			
Average initial page load	6.3	2.6	5.4
Average refresh page load	2.8	2.0	3.1
Combined initial and refresh loads	9.1	4.6	8.5
http://Github.com			
Average initial page load	1.3	1.5	1.5
Average refresh page load	1.1	1.0	1.2
Combined initial and refresh loads	2.4	2.5	2.7
http://Go.com			
Average initial page load	1.5	2.0	2.0
Average refresh page load	1.5	1.5	1.6
Combined initial and refresh loads	3.0	3.5	3.6
http://Godaddy.com			
Average initial page load	1.6	1.6	1.8
Average refresh page load	1.2	0.9	1.2
Combined initial and refresh loads	2.8	2.5	3.0
http://Google.com			
Average initial page load	1.5	0.8	1.6
Average refresh page load	0.9	0.8	1.2
Combined initial and refresh loads	2.4	1.6	2.8
http://Groupon.com			
Average initial page load	2.2	3.6	2.9
Average refresh page load	1.8	1.6	2.2
Combined initial and refresh loads	4.0	5.2	5.1
http://Homedepot.com			
Average initial page load	2.1	3.7	2.7
Average refresh page load	2.0	2.8	2.8
Combined initial and refresh loads	4.1	6.5	5.5
http://Huffingtonpost.com			
Average initial page load	2.3	6.1	3.5
Average refresh page load	2.6	2.5	2.3
Combined initial and refresh loads	4.9	8.6	5.8
http://Hulu.com			
Average initial page load	4.8	5.1	5.0
Average refresh page load	3.1	2.7	2.9
Combined initial and refresh loads	7.9	7.8	7.9

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://IMDb.com			
Average initial page load	2.2	3.4	3.1
Average refresh page load	2.4	2.3	2.4
Combined initial and refresh loads	4.6	5.7	5.5
http://imgur.com			
Average initial page load	1.6	2.5	1.8
Average refresh page load	1.8	1.7	1.5
Combined initial and refresh loads	3.4	4.2	3.3
http://Indeed.com			
Average initial page load	1.3	2.8	2.9
Average refresh page load	1.0	1.9	2.0
Combined initial and refresh loads	2.3	4.7	4.9
http://Instagram.com			
Average initial page load	1.5	2.1	2.0
Average refresh page load	0.9	1.0	1.0
Combined initial and refresh loads	2.4	3.1	3.0
http://Instructure.com			
Average initial page load	1.5	2.3	2.5
Average refresh page load	1.2	0.9	1.0
Combined initial and refresh loads	2.7	3.2	3.5
http://Intuit.com			
Average initial page load	2.7	4.2	3.1
Average refresh page load	2.2	1.9	2.5
Combined initial and refresh loads	4.9	6.1	5.6
http://LinkedIn.com			
Average initial page load	1.8	2.6	1.6
Average refresh page load	1.4	1.1	1.2
Combined initial and refresh loads	3.2	3.7	2.8
http://Live.com			
Average initial page load	1.6	2.1	1.7
Average refresh page load	1.1	1.1	1.1
Combined initial and refresh loads	2.7	3.2	2.8
http://Microsoft.com			
Average initial page load	2.2	3.8	3.3
Average refresh page load	2.2	2.7	2.1
Combined initial and refresh loads	4.4	6.5	5.4

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Microsoftonline.com			
Average initial page load	1.7	1.9	1.8
Average refresh page load	1.0	0.9	1.2
Combined initial and refresh loads	2.7	2.8	3.0
http://Mlb.com			
Average initial page load	3.4	3.0	4.2
Average refresh page load	3.6	2.3	3.4
Combined initial and refresh loads	7.0	5.3	7.6
http://Msn.com			
Average initial page load	1.5	4.4	5.0
Average refresh page load	1.3	2.3	3.1
Combined initial and refresh loads	2.8	6.7	8.1
http://Netflix.com			
Average initial page load	2.0	2.1	2.0
Average refresh page load	1.1	1.1	1.3
Combined initial and refresh loads	3.1	3.2	3.3
http://Nfl.com			
Average initial page load	5.8	5.0	4.8
Average refresh page load	5.8	3.1	3.6
Combined initial and refresh loads	11.6	8.1	8.4
http://Nytimes.com			
Average initial page load	1.8	6.0	5.8
Average refresh page load	4.9	3.4	5.4
Combined initial and refresh loads	6.7	9.4	11.2
http://Office.com			
Average initial page load	2.4	3.5	3.2
Average refresh page load	1.5	0.8	1.7
Combined initial and refresh loads	3.9	4.3	4.9
http://Outbrain.com			
Average initial page load	1.4	4.4	3.6
Average refresh page load	1.2	1.4	1.9
Combined initial and refresh loads	2.6	5.8	5.5
http://Ozock.com			
Average initial page load	1.5	2.0	2.0
Average refresh page load	1.7	1.2	1.3
Combined initial and refresh loads	3.2	3.2	3.3

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Pandora.com			
Average initial page load	5.8	4.7	5.6
Average refresh page load	8.2	3.6	5.9
Combined initial and refresh loads	14.0	8.3	11.5
http://Paypal.com			
Average initial page load	3.0	3.5	3.0
Average refresh page load	1.7	1.4	1.4
Combined initial and refresh loads	4.7	4.9	4.4
http://Pinterest.com			
Average initial page load	1.8	2.6	2.2
Average refresh page load	1.4	1.7	1.5
Combined initial and refresh loads	3.2	4.3	3.7
http://Quizlet.com			
Average initial page load	1.8	2.6	2.1
Average refresh page load	1.2	1.3	1.3
Combined initial and refresh loads	3.0	3.9	3.4
http://Quora.com			
Average initial page load	1.3	2.8	3.0
Average refresh page load	1.1	1.5	1.8
Combined initial and refresh loads	2.4	4.3	4.8
http://Reddit.com			
Average initial page load	2.2	5.3	3.7
Average refresh page load	1.6	3.5	2.6
Combined initial and refresh loads	3.8	8.8	6.3
http://Salesforce.com			
Average initial page load	2.7	4.4	5.4
Average refresh page load	3.0	2.1	2.5
Combined initial and refresh loads	5.7	6.5	7.9
http://Soundcloud.com			
Average initial page load	2.0	4.2	3.8
Average refresh page load	1.3	2.2	2.4
Combined initial and refresh loads	3.3	6.4	6.2
http://Spotify.com			
Average initial page load	3.1	5.8	5.6
Average refresh page load	1.9	2.2	2.8
Combined initial and refresh loads	5.0	8.0	8.4

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Stackexchange.com			
Average initial page load	1.0	1.4	1.2
Average refresh page load	1.0	0.8	1.0
Combined initial and refresh loads	2.0	2.2	2.2
http://Stackoverflow.com			
Average initial page load	1.2	1.4	1.5
Average refresh page load	1.2	1.0	1.3
Combined initial and refresh loads	2.4	2.4	2.8
http://Target.com			
Average initial page load	1.6	3.7	3.4
Average refresh page load	2.2	2.6	2.6
Combined initial and refresh loads	3.8	6.3	6.0
http://Thepiratebay.org			
Average initial page load	2.3	2.0	1.9
Average refresh page load	1.5	1.5	1.8
Combined initial and refresh loads	3.8	3.5	3.7
http://Thesaurus.com			
Average initial page load	6.0	5.4	4.9
Average refresh page load	3.9	3.2	3.9
Combined initial and refresh loads	9.9	8.6	8.8
http://Tripadvisor.com			
Average initial page load	2.3	2.4	3.0
Average refresh page load	1.3	1.6	1.8
Combined initial and refresh loads	3.6	4.0	4.8
http://Tumblr.com			
Average initial page load	3.5	5.5	6.5
Average refresh page load	2.4	1.7	2.2
Combined initial and refresh loads	5.9	7.2	8.7
http://Twitch.tv			
Average initial page load	3.8	5.5	5.6
Average refresh page load	3.8	3.7	4.6
Combined initial and refresh loads	7.6	9.2	10.2
http://Twitter.com			
Average initial page load	1.8	3.1	3.3
Average refresh page load	2.1	1.8	2.5
Combined initial and refresh loads	3.9	4.9	5.8

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Ups.com			
Average initial page load	1.2	1.5	1.9
Average refresh page load	0.8	0.7	0.9
Combined initial and refresh loads	2.0	2.2	2.8
http://Usatoday.com			
Average initial page load	2.6	2.3	1.8
Average refresh page load	2.5	2.1	1.9
Combined initial and refresh loads	5.1	4.4	3.7
http://Usps.com			
Average initial page load	1.5	3.2	3.7
Average refresh page load	2.2	2.2	2.2
Combined initial and refresh loads	3.7	5.4	5.9
http://Verizonwireless.com			
Average initial page load	2.6	3.7	3.9
Average refresh page load	2.2	1.8	2.3
Combined initial and refresh loads	4.8	5.5	6.2
http://Vice.com			
Average initial page load	1.8	4.6	3.2
Average refresh page load	1.7	2.3	3.3
Combined initial and refresh loads	3.5	6.9	6.5
http://Vimeo.com			
Average initial page load	2.1	3.4	4.9
Average refresh page load	2.0	1.8	4.4
Combined initial and refresh loads	4.1	5.2	9.3
http://Walmart.com			
Average initial page load	3.5	5.3	6.4
Average refresh page load	2.8	3.0	3.9
Combined initial and refresh loads	6.3	8.3	10.3
http://Washingtonpost.com			
Average initial page load	2.6	5.2	6.0
Average refresh page load	3.1	3.8	4.8
Combined initial and refresh loads	5.7	9.0	10.8
http://Weather.com			
Average initial page load	2.1	2.8	3.7
Average refresh page load	3.7	2.4	3.3
Combined initial and refresh loads	5.8	5.2	7.0

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Weebly.com			
Average initial page load	3.4	4.7	5.2
Average refresh page load	1.8	2.7	3.0
Combined initial and refresh loads	5.2	7.4	8.2
http://Wellsfargo.com			
Average initial page load	3.2	3.6	4.1
Average refresh page load	2.7	2.5	2.6
Combined initial and refresh loads	5.9	6.1	6.7
http://Westernjournalism.com			
Average initial page load	3.7	2.8	3.6
Average refresh page load	3.7	2.5	3.1
Combined initial and refresh loads	7.4	5.3	6.7
http://Wikia.com			
Average initial page load	2.2	2.2	2.3
Average refresh page load	2.2	1.5	2.1
Combined initial and refresh loads	4.4	3.7	4.4
http://Wikipedia.org			
Average initial page load	1.6	1.2	0.9
Average refresh page load	0.7	0.6	0.6
Combined initial and refresh loads	2.3	1.8	1.5
http://Wordpress.com			
Average initial page load	1.6	1.7	1.7
Average refresh page load	1.0	1.0	1.0
Combined initial and refresh loads	2.6	2.7	2.7
http://Xfinity.com			
Average initial page load	3.4	3.1	3.4
Average refresh page load	2.8	1.7	2.4
Combined initial and refresh loads	6.2		
http://Yahoo.com			
Average initial page load	2.7	4.4	3.7
Average refresh page load	1.8	2.4	3.0
Combined initial and refresh loads	4.5	6.8	6.7
http://Yelp.com			
Average initial page load	2.5	3.6	3.3
Average refresh page load	2.4	2.0	2.3
Combined initial and refresh loads	4.9	5.6	5.6

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Youtube.com			
Average initial page load	2.9	4.5	3.3
Average refresh page load	2.6	2.6	2.3
Combined initial and refresh loads	5.5	7.1	5.6
http://Zillow.com			
Average initial page load	1.8	3.1	3.4
Average refresh page load	1.6	2.8	2.3
Combined initial and refresh loads	3.4	5.9	5.7

Appendix D: Load times (in seconds) for top 100 global sites

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Adf.ly			
Average initial page load	1.9	3.2	2.4
Average refresh page load	2.8	2.2	2.1
Combined initial and refresh loads	4.7	5.4	4.5
http://Adobe.com			
Average initial page load	5.0	2.8	3.0
Average refresh page load	5.1	2.1	2.2
Combined initial and refresh loads	10.1	4.9	5.2
http://Alibaba.co			
Average initial page load	2.0	4.2	3.2
Average refresh page load	1.7	1.8	1.7
Combined initial and refresh loads	3.7	6.0	4.9
http://Aliexpress.com			
Average initial page load	2.6	4.7	6.4
Average refresh page load	1.4	1.7	2.0
Combined initial and refresh loads	4.0	6.4	8.4
http://Amazon.com			
Average initial page load	1.6	4.4	4.5
Average refresh page load	1.5	1.8	2.3
Combined initial and refresh loads	3.1	6.2	6.8
http://Amazon.co.jp			
Average initial page load	2.5	6.5	7.1
Average refresh page load	1.2	2.3	3.1
Combined initial and refresh loads	3.7	8.8	10.2
http://Amazon.co.uk			
Average initial page load	2.5	5.6	5.7
Average refresh page load	1.1	2.2	2.4
Combined initial and refresh loads	3.6	7.8	8.1
http://Amazon.de			
Average initial page load	2.5	5.8	5.6
Average refresh page load	1.3	2.0	3.0
Combined initial and refresh loads	3.8	7.8	8.6

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Amazon.in			
Average initial page load	2.2	5.9	6.5
Average refresh page load	2.5	3.2	4.1
Combined initial and refresh loads	4.7	9.1	10.6
http://Amazonaws.com			
Average initial page load	1.9	3.6	4.3
Average refresh page load	1.8	1.8	3.2
Combined initial and refresh loads	3.7	5.4	7.5
http://Apple.com			
Average initial page load	1.5	1.5	1.6
Average refresh page load	1.4	0.8	1.1
Combined initial and refresh loads	2.9	2.3	2.7
http://Ask.com			
Average initial page load	1.0	1.7	1.4
Average refresh page load	0.8	0.9	0.9
Combined initial and refresh loads	1.8	2.6	2.3
http://Baidu.com			
Average initial page load	4.3	4.1	3.8
Average refresh page load	2.3	1.2	1.7
Combined initial and refresh loads	6.6	5.3	5.5
http://Bbc.com			
Average initial page load	2.7	5.6	6.4
Average refresh page load	2.4	4.2	5.1
Combined initial and refresh loads	5.1	9.8	11.5
http://Bing.com			
Average initial page load	0.9	1.0	0.8
Average refresh page load	0.8	0.7	1.0
Combined initial and refresh loads	1.7	1.7	1.8
http://Blogger.com			
Average initial page load	1.9	2.6	2.8
Average refresh page load	0.8	0.6	0.8
Combined initial and refresh loads	2.7	3.2	3.6
http://Blogspot.com			
Average initial page load	2.0	2.9	2.7
Average refresh page load	0.9	0.7	0.8
Combined initial and refresh loads	2.9	3.6	3.5

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Booking.com			
Average initial page load	2.3	3.6	4.0
Average refresh page load	2.5	2.4	2.8
Combined initial and refresh loads	4.8	6.0	6.8
http://Cnn.com			
Average initial page load	2.5	2.2	2.6
Average refresh page load	3.0	1.6	2.5
Combined initial and refresh loads	5.5	3.8	5.1
http://Cnzz.com			
Average initial page load	9.1	9.7	10.4
Average refresh page load	5.9	4.6	2.1
Combined initial and refresh loads	15.0	14.3	12.5
http://Coccoc.com			
Average initial page load	3.2	5.3	4.1
Average refresh page load	3.0	1.5	2.8
Combined initial and refresh loads	6.2	6.8	6.9
http://Craigslist.org			
Average initial page load	1.2	1.1	1.2
Average refresh page load	0.9	0.7	0.8
Combined initial and refresh loads	2.1	1.8	2.0
http://Dropbox.com			
Average initial page load	2.1	5.6	6.7
Average refresh page load	2.1	2.4	2.9
Combined initial and refresh loads	4.2	8.0	9.6
http://Ebay.com			
Average initial page load	2.1	1.8	3.4
Average refresh page load	2.2	1.3	1.6
Combined initial and refresh loads	4.3	3.1	5.0
http://Facebook.com			
Average initial page load	1.8	2.0	2.8
Average refresh page load	1.1	0.7	1.1
Combined initial and refresh loads	2.9	2.7	3.9
http://Fc2.com			
Average initial page load	1.2	1.7	1.6
Average refresh page load	1.6	1.1	1.2
Combined initial and refresh loads	2.8	2.8	2.8

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Flipkart.com			
Average initial page load	5.1	5.1	5.5
Average refresh page load	3.4	2.1	3.1
Combined initial and refresh loads	8.5	7.2	8.6
http://Github.com			
Average initial page load	1.3	1.5	1.5
Average refresh page load	1.1	1.0	1.2
Combined initial and refresh loads	2.4	2.5	2.7
http://Gmw.cn			
Average initial page load	1.2	1.3	2.9
Average refresh page load	1.0	0.8	1.0
Combined initial and refresh loads	2.2	2.1	3.9
http://Godaddy.com			
Average initial page load	1.6	1.6	1.8
Average refresh page load	1.2	0.9	1.2
Combined initial and refresh loads	2.8	2.5	3.0
http://Google.com			
Average initial page load	1.5	0.8	1.6
Average refresh page load	0.9	0.8	1.2
Combined initial and refresh loads	2.4	1.6	2.8
http://Google.ca			
Average initial page load	1.4	1.4	1.7
Average refresh page load	0.8	0.8	1.0
Combined initial and refresh loads	2.2	2.2	2.7
http://Google.co.id			
Average initial page load	1.5	1.4	1.9
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.3	2.3	3.0
http://Google.co.in			
Average initial page load	1.4	1.5	1.7
Average refresh page load	0.9	0.9	1.0
Combined initial and refresh loads	2.3	2.4	2.7
http://Google.co.jp			
Average initial page load	1.4	1.4	1.6
Average refresh page load	0.8	0.8	1.0
Combined initial and refresh loads	2.2	2.2	2.6

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Google.co.kr			
Average initial page load	1.3	1.7	1.9
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.1	2.6	3.0
http://Google.co.uk			
Average initial page load	1.5	1.5	1.7
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.3	2.4	2.8
http://Google.com.ar			
Average initial page load	1.4	1.3	1.7
Average refresh page load	0.8	0.8	1.0
Combined initial and refresh loads	2.2	2.1	2.7
http://Google.com.au			
Average initial page load	1.2	1.4	2.3
Average refresh page load	0.8	0.8	1.0
Combined initial and refresh loads	2.0	2.2	3.3
http://Google.com.br			
Average initial page load	1.3	1.4	1.6
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.1	2.3	2.7
http://Google.com.eg			
Average initial page load	1.3	1.5	1.6
Average refresh page load	0.8	0.9	1.0
Combined initial and refresh loads	2.1	2.4	2.6
http://Google.com.hk			
Average initial page load	1.5	1.5	1.8
Average refresh page load	0.9	0.9	1.1
Combined initial and refresh loads	2.4	2.4	2.9
http://Google.com.mx			
Average initial page load	1.3	1.5	1.8
Average refresh page load	0.8	0.7	1.2
Combined initial and refresh loads	2.1	2.2	3.0
http://Google.com.pk			
Average initial page load	1.2	1.4	1.8
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.0	2.3	2.9

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Google.com.sa			
Average initial page load	1.3	1.6	1.9
Average refresh page load	0.8	0.8	1.1
Combined initial and refresh loads	2.1	2.4	3.0
http://Google.com.tr			
Average initial page load	1.3	1.5	1.8
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.1	2.4	2.9
http://Google.com.tw			
Average initial page load	1.4	1.5	2.0
Average refresh page load	0.9	0.8	1.2
Combined initial and refresh loads	2.3	2.3	3.2
http://Google.de			
Average initial page load	1.4	1.5	1.5
Average refresh page load	0.8	0.9	1.2
Combined initial and refresh loads	2.2	2.4	2.7
http://Google.es			
Average initial page load	1.4	1.6	1.6
Average refresh page load	0.9	0.8	1.1
Combined initial and refresh loads	2.3	2.4	2.7
http://Google.fr			
Average initial page load	1.5	1.5	1.6
Average refresh page load	0.9	0.8	1.2
Combined initial and refresh loads	2.4	2.3	2.8
http://Google.it			
Average initial page load	1.2	1.6	1.4
Average refresh page load	0.9	0.8	1.1
Combined initial and refresh loads	2.1	2.4	2.5
http://Google.pl			
Average initial page load	1.3	1.4	1.5
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.1	2.3	2.6
http://Google.ru			
Average initial page load	1.3	1.5	1.7
Average refresh page load	0.8	0.9	1.1
Combined initial and refresh loads	2.1	2.4	2.8

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Hao123.com			
Average initial page load	7.1	7.3	6.4
Average refresh page load	5.3	3.7	4.0
Combined initial and refresh loads	12.4	11.0	10.4
http://lmdb.com			
Average initial page load	2.2	3.4	3.1
Average refresh page load	2.4	2.3	2.4
Combined initial and refresh loads	4.6	5.7	5.5
http://imgur.com			
Average initial page load	1.6	2.5	1.8
Average refresh page load	1.8	1.7	1.5
Combined initial and refresh loads	3.4	4.2	3.3
http://Indiatimes.com			
Average initial page load	2.4	3.7	4.1
Average refresh page load	1.6	1.6	2.0
Combined initial and refresh loads	4.0	5.3	6.1
http://Instagram.com			
Average initial page load	1.5	2.1	2.0
Average refresh page load	0.9	1.0	1.0
Combined initial and refresh loads	2.4	3.1	3.0
http://LinkedIn.com			
Average initial page load	1.8	2.6	1.6
Average refresh page load	1.4	1.1	1.2
Combined initial and refresh loads	3.2	3.7	2.8
http://Live.com			
Average initial page load	1.6	2.1	1.7
Average refresh page load	1.1	1.1	1.1
Combined initial and refresh loads	2.7	3.2	2.8
http://Mail.ru			
Average initial page load	3.3	5.7	4.7
Average refresh page load	2.5	2.7	3.1
Combined initial and refresh loads	5.8	8.4	7.8
http://Microsoft.com			
Average initial page load	2.2	3.8	3.3
Average refresh page load	2.2	2.7	2.1
Combined initial and refresh loads	4.4	6.5	5.4

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Microsoftonline.com			
Average initial page load	1.7	1.9	1.8
Average refresh page load	1.0	0.9	1.2
Combined initial and refresh loads	2.7	2.8	3.0
http://Msn.com			
Average initial page load	1.5	4.4	5.0
Average refresh page load	1.3	2.3	3.1
Combined initial and refresh loads	2.8	6.7	8.1
http://Naver.com			
Average initial page load	2.4	2.9	3.0
Average refresh page load	1.7	1.4	2.6
Combined initial and refresh loads	4.1	4.3	5.6
http://Netflix.com			
Average initial page load	2.0	2.1	2.0
Average refresh page load	1.1	1.1	1.3
Combined initial and refresh loads	3.1	3.2	3.3
http://Office.com			
Average initial page load	2.4	3.5	3.2
Average refresh page load	1.5	0.8	1.7
Combined initial and refresh loads	3.9	4.3	4.9
http://Ok.ru			
Average initial page load	2.9	5.4	4.3
Average refresh page load	2.5	1.5	2.5
Combined initial and refresh loads	5.4	6.9	6.8
http://Paypal.com			
Average initial page load	3.0	3.5	3.0
Average refresh page load	1.7	1.4	1.4
Combined initial and refresh loads	4.7	4.9	4.4
http://Pinterest.com			
Average initial page load	1.8	2.6	2.2
Average refresh page load	1.4	1.7	1.5
Combined initial and refresh loads	3.2	4.3	3.7
http://Pixnet.net			
Average initial page load	5.8	10.5	11.1
Average refresh page load	2.9	4.5	6.1
Combined initial and refresh loads	8.7	15.0	17.2

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Qq.com			
Average initial page load	6.6	8.2	6.2
Average refresh page load	5.4	2.3	3.6
Combined initial and refresh loads	12.0	10.5	9.8
http://Quora.com			
Average initial page load	1.3	2.8	3.0
Average refresh page load	1.1	1.5	1.8
Combined initial and refresh loads	2.4	4.3	4.8
http://Rakuten.co.jp			
Average initial page load	4.1	2.9	3.5
Average refresh page load	4.8	1.9	2.8
Combined initial and refresh loads	8.9	4.8	6.3
http://Reddit.com			
Average initial page load	2.2	5.3	3.7
Average refresh page load	1.6	3.5	2.6
Combined initial and refresh loads	3.8	8.8	6.3
http://Salesforce.com			
Average initial page load	2.7	4.4	5.4
Average refresh page load	3.0	2.1	2.5
Combined initial and refresh loads	5.7	6.5	7.9
http://Sina.com.cn			
Average initial page load	2.8	3.5	3.9
Average refresh page load	2.1	1.5	2.3
Combined initial and refresh loads	4.9	5.0	6.2
http://So.com			
Average initial page load	3.5	6.3	7.4
Average refresh page load	1.2	1.6	2.4
Combined initial and refresh loads	4.7	7.9	9.8
http://Sohu.com			
Average initial page load	6.9	16.1	7.4
Average refresh page load	9.9	2.7	4.7
Combined initial and refresh loads	16.8	18.8	12.1
http://Soso.com			
Average initial page load	5.2	7.6	6.9
Average refresh page load	4.1	4.0	4.3
Combined initial and refresh loads	9.3	11.6	11.2

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Stackoverflow.com			
Average initial page load	1.2	1.4	1.5
Average refresh page load	1.2	1.0	1.3
Combined initial and refresh loads	2.4	2.4	2.8
http://Taobao.com			
Average initial page load	5.6	4.6	4.5
Average refresh page load	3.5	2.9	2.9
Combined initial and refresh loads	9.1	7.5	7.4
http://Tianya.cn			
Average initial page load	2.5	2.4	2.6
Average refresh page load	2.1	1.8	1.6
Combined initial and refresh loads	4.6	4.2	4.2
http://Tmall.com			
Average initial page load	5.1	5.8	5.0
Average refresh page load	2.1	1.9	2.3
Combined initial and refresh loads	7.2	7.7	7.3
http://Tumblr.com			
Average initial page load	3.5	5.5	6.5
Average refresh page load	2.4	1.7	2.2
Combined initial and refresh loads	5.9	7.2	8.7
http://Twitch.tv			
Average initial page load	3.8	5.5	5.6
Average refresh page load	3.8	3.7	4.6
Combined initial and refresh loads	7.6	9.2	10.2
http://Twitter.com			
Average initial page load	1.8	3.1	3.3
Average refresh page load	2.1	1.8	2.5
Combined initial and refresh loads	3.9	4.9	5.8
http://Vk.com			
Average initial page load	3.2	3.7	3.6
Average refresh page load	3.6	1.3	2.1
Combined initial and refresh loads	6.8	5.0	5.7
http://Weibo.com			
Average initial page load	7.1	9.6	11.6
Average refresh page load	2.4	3.1	3.6
Combined initial and refresh loads	9.5	12.7	15.2

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Whatsapp.com			
Average initial page load	1.6	1.8	1.9
Average refresh page load	0.8	0.8	0.7
Combined initial and refresh loads	2.4	2.6	2.6
http://Wikia.com			
Average initial page load	2.2	2.2	2.3
Average refresh page load	2.2	1.5	2.1
Combined initial and refresh loads	4.4	3.7	4.4
http://Wikipedia.org			
Average initial page load	1.6	1.2	0.9
Average refresh page load	0.7	0.6	0.6
Combined initial and refresh loads	2.3	1.8	1.5
http://Wordpress.com			
Average initial page load	1.6	1.7	1.7
Average refresh page load	1.0	1.0	1.0
Combined initial and refresh loads	2.6	2.7	2.7
http://Xinhuanet.com			
Average initial page load	4.7	6.4	5.7
Average refresh page load	6.4	5.1	5.3
Combined initial and refresh loads	11.1	11.5	11.0
http://Yahoo.com			
Average initial page load	2.7	4.4	3.7
Average refresh page load	1.8	2.4	3.0
Combined initial and refresh loads	4.5	6.8	6.7
http://Yahoo.co.jp			
Average initial page load	5.3	7.5	6.5
Average refresh page load	5.6	4.1	5.0
Combined initial and refresh loads	10.9	11.6	11.5
http://Yandex.ru			
Average initial page load	2.8	3.4	3.3
Average refresh page load	2.0	1.3	1.6
Combined initial and refresh loads	4.8	4.7	4.9
http://Youku.com			
Average initial page load	4.4	5.0	5.4
Average refresh page load	4.6	3.1	2.6
Combined initial and refresh loads	9.0	8.1	8.0

	Microsoft Edge	Google Chrome	Mozilla Firefox
http://Youth.cn			
Average initial page load	3.7	3.6	4.5
Average refresh page load	6.1	1.8	3.3
Combined initial and refresh loads	9.8	5.4	7.8
http://Youtube.com			
Average initial page load	2.9	4.5	3.3
Average refresh page load	2.6	2.6	2.3
Combined initial and refresh loads	5.5	7.1	5.6

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