Browser Wars: Chrome vs. IE10 vs. Firefox

Browsers just get faster, leaner, and more able to turn websites into full-blown apps. We compare not only the big three, but also Maxthon and Opera.



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With Internet Explorer 10 finally available to Windows 7 users, the emergence of Maxthon as unique powerhouse among web browsers, and Firefox and Chrome continually bumping up version numbers and adding new standards support and more speed, it's high time for another round of our Browser Wars! Truth be told: Today's major browsers are all so good that picking a winner can be tough.

So how *do* you pick a Web browser? The first consideration is whether the browser actually runs on your computer. For this shoot-out, we focus on Windows PCs (which is why we omit the excellent Apple Safari), but most browsers come in flavors for other operating systems. If you want to run the new Internet Explorer 10, you'll only be able to do so if you've got a PC running Window 8 or Windows 7. The other main Windows options—Firefox, Chrome, Opera, and Maxthon (in order of popularity)—all run on Windows versions back to XP, and they're all available to users of Apple Mac computers, too.

Ubuntu users will be best served by Firefox, which comes with the OS by default. Ubuntu users are likely the kind of folks who want all of Firefox's customizability. But Chrome and Opera are also available for the open-source OS, though you'll have to add their repositories, since they don't show up in the default Ubuntu Software Center.

FEATURED IN THIS ROUNDUP



Chrome 25

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Chrome Instant means your Web page is ready to read before you finish typing the address. This, its speed and minimalist design have deservedly been attracting more and more users to the browser. Leading HTML5 support means it will be ready for the future, application-like Web. Hardware acceleration adds even more speed, and though Google has implemented Do Not Track privacy protection (set to off by default), it's probably not the best choice for privacy mavens. Read the full review >>



Firefox 19

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Firefox versions keep coming at a fast clip, now that Mozilla hews to a Chrome-like rapid release schedule. These frequent versions haven't brought the kind of earth-shattering changes we used to see in new full-number Firefox updates, but the development teams have tackled issues of importance to a lot of Web users—startup time, memory use, speed, and of course security. This lean, fast, customizable browser can hold its own against any competitor, and it offers graphics hardware acceleration, good HTML5 support, and the unique Panorama system for organizing lots of tabs. Read the full review >>



Internet Explorer 10 (IE10)

Now available for Windows 7 as well as for Windows 8 (but not for Vista or XP), Microsoft's latest browser is faster, trimmer, far more compliant with HTML5—a major improvement over its predecessor. It also brings some unique capabilities like tabpinning and leading hardware acceleration, and excellent privacy tools like Do Not Track enabled by default and the more-powerful Tracking Protection feature.

Read the full review >>



Maxthon 4

Recently re-dubbed a "Cloud Browser," thanks to its extensive syncing service, Maxthon is the app in this roundup known and used by the fewest people. But it offers among the most in tools, and surprisingly good performance and HTML5 support. If the idea of being able to take a screen capture of a webpage, download video, or switch to a dark view for night viewing appeals to you, give Maxthon a download. Site compatibility is guaranteed, since Maxthon uses both Chrome and IE's webpage rendering engines. The only thing missing is hardware acceleration—yet. Read the full review >>



Opera 12

Like the other current browsers, Opera is fast, compliant with HTML5, and spare of interface. Long an innovator, recently it's added support for HTML5 getUserMedia, which lets webpages access your webcam (with your permission, of course). Opera's Turbo speeds up the Web on slow connections through caching. Extension support actually followed other browsers, but Oslo still impresses with tab stacking, visual mouse gestures, a built-in Bittorrent client, and live Speed Dial tile apps. Read the full review >>

The Speed Factor

Maybe for you, choosing a browser is simply a matter of speed? If so, you'll find that answering the question of which browser is fastest is hardly cut-and-dried, as my article, By the Numbers: the Fastest Browser illustrates. You could run a bunch of synthetic benchmarks, which do offer at least some insight into real-world performance. Here are my latest results on a few of the most often cited JavaScript benchmarks run on a mediocre 2.5GHz dual-core laptop:

SunSpider 0.9.1			
Browser	Score in ms (lower is better)		
Internet Explorer 10	180		
Google Chrome 25	238		
Internet Explorer 9	260		
Firefox 19	277		
Opera 12	302		
Maxthon 4	328		
Google V8 (v.7)			
Browser	Score (higher is better)		
Google Chrome 25	10111		
Maxthon 4	9703		
Firefox 19	6817		
Internet Explorer 10	4525		
Opera 12	3840		
Internet Explorer 9	2048		
Mozilla Kraken 1.1			
Browser	Score in ms (lower is better)		
Google Chrome 25	2660		
Maxthon 4	3156		
Firefox 19	3247		

Internet Explorer 10	8829
Opera 12	12336
Internet Explorer 9	16794

A few takeaways from all this: IE10 is vastly faster than IE9, so if you're a dyed-in-the-wool IE user, definitely upgrade to version 10. Chrome users get automatically updated to the latest version, and that browser perennially yields top showings on browser benchmarks, though Maxthon is nipping at its heels on some of the tests. Firefox consistently posts respectable results in the middle of the pack.

Alternatively, you could just see how fast pages load in each browser, but that's completely dependent on your internet connection. One thing that you can test with some authority is the time it takes for the browser to start up. Here are my results for that one using a mediocre 2.5GHz dual-core laptop:

Startup Time				
Browser	Cold Startup Time (seconds)	Warm Startup Time (seconds)		
Internet Explorer 10	2.5	0.9		
Internet Explorer 9	3.0	1.3		
Chrome 25	3.1	0.8		
Firefox 19	3.3	1.1		
Maxthon 4	4.3	1.5		
Opera 12	10.1	2.9		

Again, pretty close, aside from Opera's poor initial startup time, though its restarts are fast enough. This is clearly not the main differentiator among browsers anymore, and if you have a reasonably new PC, you won't notice a significant delay in startup.

Another overriding criterion is the browsers' standards compliance. You certainly want the program to be able to correctly display the sites you visit. Though HTML5 isn't yet an official standard of the Web's governing body, the W3C, it's being used by more and more sites, and support is increasing in the browsers. One test of this new support is the HTML5Test.com site, which reports a score based on supported HTML5 features out of a possible 500 points, along with bonus points for extra capabilities not technically part of HTML5. Here's how the current crop of browsers pan out on this one:

HTML5Test.com				
Browser	Score (higher is better)	Bonus Points		
Maxthon 4	464	15		
Chrome 25	463	13		
Opera 12	419	9		
Firefox 19	393	10		
Internet Explorer 10	320	6		
Internet Explorer 9	138	5		

Here you can see that IE10 finally gets in the 300s, a vast improvement over its predecessor, though a significant amount of ground still remains between it and the leaders, Maxthon and Chrome.