

WIKIPEDIA

Firefox

**Mozilla Firefox**, or simply **Firefox**, is a free and open-source<sup>[24]</sup> web browser developed by the Mozilla Foundation and its subsidiary, Mozilla Corporation. Firefox uses the Gecko layout engine to render web pages, which implements current and anticipated web standards.<sup>[25]</sup> In 2017, Firefox began incorporating new technology under the code name Quantum to promote parallelism and a more intuitive user interface.<sup>[26]</sup> Firefox is officially available for Windows 7 or newer, macOS, and Linux. Its unofficial ports are available for various Unix and Unix-like operating systems including FreeBSD,<sup>[9]</sup> OpenBSD,<sup>[10]</sup> NetBSD,<sup>[11]</sup> illumos,<sup>[12]</sup> and Solaris Unix.<sup>[14]</sup> Firefox is also available for Android and iOS; however, the iOS version uses the WebKit layout engine instead of Gecko due to platform limitations, as with all other iOS web browsers.

Firefox was created in 2002 under the codename "Phoenix" by the Mozilla community members who desired a standalone browser, rather than the Mozilla Application Suite bundle. During its beta phase, Firefox proved to be popular with its testers and was praised for its speed, security, and add-ons compared to Microsoft's then-dominant Internet Explorer 6. Firefox was released on November 9, 2004,<sup>[27]</sup> and challenged Internet Explorer's dominance with 60 million downloads within nine months.<sup>[28]</sup> Firefox is the spiritual successor of Netscape Navigator, as the Mozilla community was created by Netscape in 1998 before their acquisition by AOL.<sup>[29]</sup>

Firefox usage grew to a peak of 32.21% at the end of 2009,<sup>[30]</sup> with version 3.5 overtaking Internet Explorer 7, although not all versions of Internet Explorer as a whole.<sup>[31][32]</sup> Usage then declined in competition with Google Chrome.<sup>[30]</sup> As of January 2020, Firefox has 9.87% usage share as a "desktop" browser, according to StatCounter, making it the second-most popular browser against Google Chrome with 68.78% (while share of Firefox is

Firefox



Firefox 71 with its menu as opened, running on Fedora Linux and GNOME Shell, showing the Mozilla Thunderbird official website

Developer(s)	Mozilla Foundation and its contributors Mozilla Corporation
Initial release	September 23, 2002 <sup>[1]</sup>
Stable release(s) <span> </span> <span>[</span> ± <span>]</span> <span>(<a href="https://en.wikipedia.org/wiki/Template:Latest_stable_software_release/Firefox?action=edit">https://en.wikipedia.org/wiki/Template:Latest_stable_software_release/Firefox?action=edit</a>)</span>	
Standard	73.0.1 / February 18, 2020 <sup>[2]</sup>
Extended Support Release	68.5.0 / February 11, 2020 <sup>[3]</sup>
Preview release(s) <span> </span> <span>[</span> ± <span>]</span> <span>(<a href="https://en.wikipedia.org/wiki/Template:Latest_preview_software_release/Firefox?action=edit">https://en.wikipedia.org/wiki/Template:Latest_preview_software_release/Firefox?action=edit</a>)</span>	
Beta & Developer Edition	74.0b1 (beta, usually named in the form 74.0bX) / released every week <sup>[4][5]</sup>
Nightly	75.0a1 (alpha, usually named in the form 75.0aX) / released every day <sup>[6][7]</sup>
Repository	<a href="https://hg.mozilla.org/mozilla-central/">https://hg.mozilla.org/mozilla-central/</a>

exceptionally high in some countries where it is most popular; up to over 75% share);<sup>[33]</sup> usage share across all platforms is lower at 4.7% (third-most popular overall).<sup>[34]</sup> According to Mozilla, in December 2014, there were half a billion Firefox users around the world. Although the majority of countries have Google Chrome as their main web browser, Firefox still has over 50% desktop usage in Cuba and Eritrea. Firefox also still has over 40% usage in Armenia and over 20% usage in Germany, Austria, Poland, Luxembourg, Iran, Myanmar, East Timor, Burkina Faso, Madagascar, Cameroon, Ethiopia, Mali, Togo and Uganda.<sup>[35]</sup>

Contents

History

Features

- Standards
- Security

Localizations

Platform availability

- Microsoft Windows
- macOS
- Linux
- Firefox for mobile
- Unofficial ports
- Gallery

Experimental builds and ESR

Licensing

Trademark and logo

- Branding and visual identity

Promotion

Performance

Market adoption

See also

References

Further reading

External links

Written in	C++, JavaScript, CSS, HTML, C, Rust <sup>[8]</sup>
Engines	Gecko, Quantum, SpiderMonkey
Operating system	Linux  macOS: OS X 10.9 or later  Windows 7 or later  Android Jelly Bean or later  iOS 11 or later  <b>Unofficial ports:</b>  FreeBSD <sup>[9]</sup>  OpenBSD <sup>[10]</sup>  NetBSD <sup>[11]</sup>  illumos <sup>[12][13]</sup>  Solaris <sup>[14][15]</sup>
Included with	Various Unix-like operating systems
Size	<b>Linux, IA-32:</b> 65.3 MB <sup>[16]</sup>  <b>Linux, x64:</b> 63.2 MB <sup>[17]</sup>  <b>macOS:</b> 66.1 MB <sup>[18]</sup>  <b>Windows, IA-32:</b> 47.3 MB <sup>[19]</sup>  <b>Windows, x64:</b> 48.7 MB <sup>[20]</sup>
Standard(s)	HTML5, CSS3
Available in	90 languages <sup>[21]</sup>
Type	Web browser
License	MPL 2.0 <sup>[22][23]</sup>
Website	<a href="http://www.mozilla.org/firefox/">www.mozilla.org/firefox/</a> ( <a href="http://www.mozilla.org/firefox/">http s://www.mozilla.org/firefox/</a> )



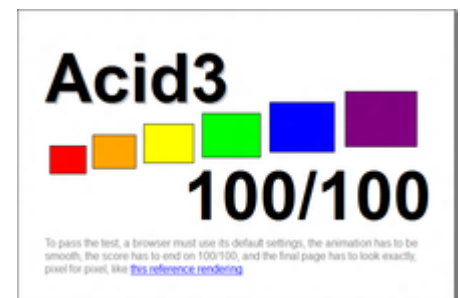
Features include tabbed browsing, spell checking, incremental search, live bookmarking, Smart Bookmarks, a download manager, private browsing, location-aware browsing (also known as "geolocation") based on a Google service,<sup>[59]</sup> and an integrated search system, which uses Google by default in most markets.<sup>[60]</sup> Additionally, Firefox provides an environment for web developers in which they can use built-in tools, such as the Error Console or the DOM Inspector, or extensions, such as Firebug and more recently there has been an integration feature with Pocket. Firefox Hello was an implementation of WebRTC, added in October 2014, which allows users of Firefox and other compatible systems to have a video call, with the extra feature of screen and file sharing by sending a link to each other. Firefox Hello was scheduled to be removed in September 2016.<sup>[61]</sup>

Functions can be added through add-ons created by third-party developers. Add-ons are primarily coded using an HTML and JavaScript API known as WebExtensions, which is designed to be similar to the Google Chrome and Microsoft Edge extension systems. Firefox previously supported add-ons using the XUL and XPCOM APIs, which allowed them to directly access and manipulate much of the browser's internal functionality. As compatibility was not included in the multi-process architecture, XUL add-ons have been deemed *Legacy add-ons* and are no longer supported on Firefox 57 and newer.<sup>[62][63]</sup>

Firefox can have themes added to it, which users can create or download from third parties to change the appearance of the browser. The Firefox add-on website also gives users the ability to add other applications such as games, ad-blockers, screenshot apps, and many other apps.<sup>[64][65]</sup>

## Standards

Firefox implements many web standards, including HTML4 (almost full HTML5), XML, XHTML, MathML, SVG 2 (partial),<sup>[66][67]</sup> CSS (with extensions),<sup>[68]</sup> ECMAScript (JavaScript), DOM, XSLT, XPath, and APNG (Animated PNG) images with alpha transparency.<sup>[69]</sup> Firefox also implements standards proposals created by the WHATWG such as client-side storage,<sup>[70][71]</sup> and the canvas element.<sup>[72]</sup> These standards are implemented through the Gecko layout engine, and SpiderMonkey JavaScript engine.



The result of the Acid3 test on Firefox 17

Firefox has passed the Acid2 standards-compliance test since version 3.0.<sup>[73]</sup> Mozilla had originally stated that they did not intend for Firefox to pass the Acid3 test fully because they believed that the SVG fonts part of the test had become outdated and irrelevant, due to WOFF being agreed upon as a standard by all major browser makers.<sup>[74]</sup> Because the SVG font tests were removed from the Acid3 test in September 2011, Firefox 4 and greater scored 100/100.<sup>[75][76]</sup>

Firefox also implements "Safe Browsing",<sup>[77]</sup> a proprietary protocol<sup>[78]</sup> from Google used to exchange data related with phishing and malware protection.

Since version 38 on Windows Vista and newer, Firefox supports the playback of video content protected by HTML5 Encrypted Media Extensions (EME). For security and privacy reasons, EME is implemented within a wrapper of open-source code that allows execution of a proprietary DRM

module by Adobe Systems—Adobe Primetime Content Decryption Module (CDM). CDM runs within a "sandbox" environment to limit its access to the system, and provide it a randomized device ID to prevent services from uniquely identifying the device for tracking purposes. The DRM module, once it has been downloaded, is enabled and disabled in the same manner as other plug-ins. Since version 47,<sup>[79]</sup> "Google's Widevine CDM on Windows and Mac OS X so streaming services like Amazon Video can switch from Silverlight to encrypted HTML5 video" is also supported. Mozilla justified its partnership with Adobe and Google by stating

Firefox downloads and enables the Adobe Primetime and Google Widevine CDMs by default to give users a smooth experience on sites that require DRM. Each CDM runs in a separate container called a sandbox and you will be notified when a CDM is in use. You can also disable each CDM and opt out of future updates

— Watch DRM content on Firefox<sup>[80]</sup>

and that it is "an important step on Mozilla's roadmap to remove NPAPI plugin support."<sup>[81]</sup> Upon the introduction of EME support, builds of Firefox on Windows were also introduced that exclude support for EME.<sup>[82][83]</sup> The Free Software Foundation and Cory Doctorow condemned Mozilla's decision to support EME.<sup>[84]</sup>

On the HTML5 web standards test, Firefox 69 scores 528 out of 582 points<sup>[85]</sup> (70.0 beta has 531 points).

## Security

Firefox allowed for a sandbox security model to manage privileges accorded to JavaScript code, but that feature has since been deprecated.<sup>[86]</sup> It limits scripts from accessing data from other websites based on the same-origin policy.<sup>[87]</sup> It also provides support for smart cards to web applications, for authentication purposes.<sup>[88]</sup> It uses TLS to protect communications with web servers using strong cryptography when using the HTTPS protocol.<sup>[89]</sup> The freely available HTTPS Everywhere add-on enforces HTTPS, even if a regular HTTP URL is entered. Firefox now supports HTTP/2.<sup>[90]</sup>

The Mozilla Foundation offers a "bug bounty" (US\$3,000 to US\$7,500 cash reward) to researchers who discover severe security holes in Firefox.<sup>[91]</sup> Official guidelines for handling security vulnerabilities discourage early disclosure of vulnerabilities so as not to give potential attackers an advantage in creating exploits.<sup>[92]</sup>

Because Firefox generally has fewer publicly known security vulnerabilities than Internet Explorer (see *Comparison of web browsers*), improved security is often cited as a reason to switch from Internet Explorer to Firefox.<sup>[93][94][95][96]</sup> *The Washington Post* reported that exploit code for known critical security vulnerabilities in Internet Explorer was available for 284 days in 2006. In comparison, exploit code for known, critical security vulnerabilities in Firefox was available for nine days before Mozilla issued a patch to remedy the problem.<sup>[97]</sup>

A 2006 Symantec study showed that, although Firefox had surpassed other browsers in the number of vendor-confirmed vulnerabilities that year through September, these vulnerabilities were patched far more quickly than those found in other browsers, with Firefox's vulnerabilities being fixed on average

one day after the exploit code was made available, as compared to nine days for Internet Explorer.<sup>[98]</sup> Symantec later clarified their statement, saying that Firefox still had fewer security vulnerabilities than Internet Explorer, as counted by security researchers.<sup>[99]</sup>

In 2010, a study of the National Institute of Standards and Technology (NIST), based on data compiled from the National Vulnerability Database (NVD), Firefox was listed as the fifth-most vulnerable desktop software, with Internet Explorer as the eighth, and Google Chrome as the first.<sup>[100]</sup>

InfoWorld has cited security experts saying that, as Firefox becomes more popular, more vulnerabilities will be found,<sup>[101]</sup> a claim that Mitchell Baker, president of the Mozilla Foundation, has denied. "There is this idea that market share alone will make you have more vulnerabilities. It is not relational at all," she said.<sup>[102]</sup>

In October 2009, Microsoft's security engineers acknowledged that Firefox was vulnerable to a security issue found in the 'Windows Presentation Foundation' browser plug-in since February of that year. A .NET Framework 3.5 SP1 Windows Update had silently installed the vulnerable plug-in into Firefox.<sup>[103]</sup> This vulnerability has since been patched by Microsoft.<sup>[104]</sup>

As of February 11, 2011, Firefox 3.6 had no known unpatched security vulnerabilities according to Secunia.<sup>[105]</sup> Internet Explorer 8 had five unpatched security vulnerabilities, the worst being rated "Less Critical" by Secunia.<sup>[106]</sup> Mozilla claims that all patched vulnerabilities of Mozilla products are publicly listed.<sup>[107]</sup>

On January 28, 2013, Mozilla was recognized as the most trusted internet company for privacy in 2012.<sup>[108]</sup> This study was performed by the Ponemon Institute and was a result of a survey from more than 100,000 consumers in the United States.

In February 2013, plans were announced for Firefox 22 to disable third-party cookies by default. However, the introduction of the feature was then delayed so Mozilla developers could "collect and analyze data on the effect of blocking some third-party cookies." Mozilla also collaborated with Stanford University's "Cookie Clearinghouse" project to develop a blacklist and whitelist of sites that will be used in the filter.<sup>[109][110]</sup>

Version 23, released in August 2013, followed the lead of its competitors by blocking iframe, stylesheet, and script resources served from non-HTTPS servers embedded on HTTPS pages by default. Additionally, JavaScript could also no longer be disabled through Firefox's preferences, and JavaScript was automatically re-enabled for users who upgraded to 23 or higher with it disabled. The change was made due to its use across the majority of websites, the potential repercussions on inexperienced users who are unaware of its impact, along with the availability of extensions such as NoScript, which can disable JavaScript in a more controlled fashion. The following release added the ability to disable JavaScript through the developer tools for testing purposes.<sup>[111][112][113]</sup>

In January 2015, TorrentFreak reported that using Firefox when connected to the internet using a VPN can be a serious security issue due to the browser's support for WebRTC.<sup>[114]</sup>



Beginning with Firefox 48, all extensions must be signed by Mozilla to be used in release and beta versions of Firefox. Firefox 43 blocked unsigned extensions, but allowed enforcement of extension signing to be disabled. All extensions must be submitted to Mozilla Add-ons and be subject to code analysis in order to be signed, although extensions do not have to be listed on the service in order to be signed.<sup>[115][116]</sup> On May 2, 2019, Mozilla announced that it would be strengthening the signature enforcement with methods that included the retroactive disabling of old extensions now deemed to be insecure. A Firefox update on May 3 led to bug reports about all extensions being disabled. This was found to be the result of an overlooked certificate and not the policy change set to go into effect on June 10.<sup>[117]</sup>

In Firefox versions prior to 7.0, an information bar appears on the browser's first start asking users whether they would like to send performance statistics, or "telemetry", to Mozilla. It is enabled by default in development versions of Firefox, but not in release versions.<sup>[118]</sup> According to Mozilla's privacy policy,<sup>[119]</sup> these statistics are stored only in aggregate format, and the only personally identifiable information transmitted is the user's IP address.

In November 2018, Firefox began using a sandbox to isolate web tabs from each other and from the rest of the system. Its lack of such a feature had previously earned it negative comparisons with Google Chrome and Microsoft Edge.<sup>[120][121]</sup>

Since version 60 Firefox includes the option to use DNS over HTTPS (DoH), which causes DNS lookup requests to be sent encrypted over the HTTPS protocol. To use this feature the user must set certain preferences beginning with "network.trr" (Trusted Recursive Resolver) in about:config: if network.trr.mode is 0, DoH is disabled; 1 activates DoH in addition to unencrypted DNS; 2 causes DoH to be used before unencrypted DNS; to use only DoH, the value must be 3. By setting network.trr.uri to the URL https://mozilla.cloudflare-dns.com/dns-query special Cloudflare servers will be activated.<sup>[122]</sup> Mozilla has a privacy agreement with this server host that restricts their collection of information about incoming DNS requests.<sup>[123]</sup>

On May 21, 2019, Firefox was updated to include the ability to block scripts that used a computer's CPU to mine cryptocurrency without a user's permission, in Firefox version 67.0. The update also allowed users to block known fingerprinting scripts that track their activity across the web, however it does not resist fingerprinting on its own.<sup>[124]</sup>

On July 2, 2019, Mozilla introduced a mechanism to allow Firefox to automatically trust OS-installed certificates to prevent TLS errors.<sup>[125]</sup>

In October 2019, ZDNet reported Firefox version 68 ESR passed all minimum requirements for mandatory security features during an exam by the Federal Office for Information Security of Germany.<sup>[126]</sup>

On December 17, 2019, Mozilla announced a partnership with NextDNS to provide Firefox users with encrypted Domain Name System (DNS) services through its Trusted Recursive Resolver. With Cloudflare, this is the second public DNS resolver to be integrated as DoH provider in Firefox.<sup>[127]</sup>

In Mozilla Foundation Security Advisory 2020-03, the company reported that the CVE-2019-17026 vulnerability (type confusion vulnerability in IonMonkey) had been detected in the wild and was being actively exploited.<sup>[128][129]</sup>

## Localizations

Firefox is a widely localized web browser. The first official release in November 2004 supported 24 different languages and for 28 locales, including British English, American English, Spanish, Argentine Spanish, and Chinese in Traditional Chinese characters and Simplified Chinese characters.<sup>[130]</sup> As of February 2020, currently supported versions 73.0.1 and 68.0.2 are available in 89 locales (79 languages).<sup>[21]</sup>

for Mobile 32 Release Notes" (<https://www.mozilla.org/en-US/mobile/32.0/releasenotes/>). mozilla.org. Mozilla Foundation. September 2, 2014.

## Platform availability

The desktop version of Firefox is available and supported for Microsoft Windows, macOS and Linux, while Firefox for Android is available for Android (formerly Firefox for mobile, it also ran on Firefox OS).



Operating system		Latest stable version	Support status
Windows	<u>10</u>	<b>73.0.1 (ARMv8-A)</b> ( <a href="https://archive.mozilla.org/pub/firefox/releases/73.0.1/win64-aarch64/">https://archive.mozilla.org/pub/firefox/releases/73.0.1/win64-aarch64/</a> ) <sup>[131]</sup>	2019–
		68.5.0esr (ARMv8-A) ( <a href="https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/win64-aarch64/">https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/win64-aarch64/</a> ) <sup>[132]</sup>	
	<u>7</u> and later, <u>Server 2008 R2</u> and later	<b>73.0.1 (x64)</b> ( <a href="https://archive.mozilla.org/pub/firefox/releases/73.0.1/win64/">https://archive.mozilla.org/pub/firefox/releases/73.0.1/win64/</a> )	2015–
		68.5.0esr (x64) ( <a href="https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/win64/">https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/win64/</a> )	
		<b>73.0.1 (IA-32)</b> ( <a href="https://archive.mozilla.org/pub/firefox/releases/73.0.1/win32/">https://archive.mozilla.org/pub/firefox/releases/73.0.1/win32/</a> )	2009–
		68.5.0esr (IA-32) ( <a href="https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/win32/">https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/win32/</a> )	
	<u>XP</u> , <u>Vista</u> , <u>Server 2003</u> and <u>Server 2008</u>	52.9.0esr (IA-32) ( <a href="https://archive.mozilla.org/pub/firefox/releases/52.9.0esr/win32/">https://archive.mozilla.org/pub/firefox/releases/52.9.0esr/win32/</a> )	2004–2018
		52.0.2 (IA-32) ( <a href="https://archive.mozilla.org/pub/firefox/releases/52.0.2/win32/">https://archive.mozilla.org/pub/firefox/releases/52.0.2/win32/</a> ) <sup>[133]</sup>	2004–2017
	<u>2000</u>	10.0.12esr ( <a href="https://archive.mozilla.org/pub/firefox/releases/10.0.12esr/win32/">https://archive.mozilla.org/pub/firefox/releases/10.0.12esr/win32/</a> )	2004–2013
		12.0 ( <a href="https://archive.mozilla.org/pub/firefox/releases/12.0/win32/">https://archive.mozilla.org/pub/firefox/releases/12.0/win32/</a> ) <sup>[134]</sup>	2004–2012
	<u>NT 4.0</u> (IA-32), <u>98</u> and <u>Me</u>	2.0.0.20 ( <a href="https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/win32/">https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/win32/</a> )	2004–2008
	<u>95</u>	1.5.0.12 ( <a href="https://archive.mozilla.org/pub/firefox/releases/1.5.0.12/win32/">https://archive.mozilla.org/pub/firefox/releases/1.5.0.12/win32/</a> )	2004–2007
macOS	<u>10.9</u> and later	<b>73.0.1</b> ( <a href="https://archive.mozilla.org/pub/firefox/releases/73.0.1/mac/">https://archive.mozilla.org/pub/firefox/releases/73.0.1/mac/</a> ) <sup>[131]</sup>	2013–
		68.5.0esr ( <a href="https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/mac/">https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/mac/</a> ) <sup>[132]</sup>	
	<u>10.6–10.8</u>	45.9.0esr ( <a href="https://archive.mozilla.org/pub/firefox/releases/45.9.0esr/mac/">https://archive.mozilla.org/pub/firefox/releases/45.9.0esr/mac/</a> ) <sup>[135]</sup>	2009–2017
		47.0.1 ( <a href="https://archive.mozilla.org/pub/firefox/releases/47.0.1/mac/">https://archive.mozilla.org/pub/firefox/releases/47.0.1/mac/</a> ) <sup>[136]</sup>	2009–2016
	<u>10.5</u> (IA-32,x64)	10.0.12esr ( <a href="https://archive.mozilla.org/pub/firefox/releases/10.0.12esr/mac/">https://archive.mozilla.org/pub/firefox/releases/10.0.12esr/mac/</a> )	2007–2013
		16.0.2 ( <a href="https://archive.mozilla.org/pub/firefox/releases/16.0.2/mac/">https://archive.mozilla.org/pub/firefox/releases/16.0.2/mac/</a> ) <sup>[137]</sup>	2007–2012
	<u>10.4</u> (IA-32,PPC)– <u>10.5</u> (PPC)	3.6.28 ( <a href="https://archive.mozilla.org/pub/firefox/releases/3.6.28/mac/">https://archive.mozilla.org/pub/firefox/releases/3.6.28/mac/</a> ) <sup>[138][139]</sup>	2005–2012
	<u>10.2–10.3</u>	2.0.0.20 ( <a href="https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/mac/">https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/mac/</a> )	2004–2008
Linux desktop	<u>10.0–10.1</u>	1.0.8 ( <a href="https://archive.mozilla.org/pub/firefox/releases/1.0.8/mac/">https://archive.mozilla.org/pub/firefox/releases/1.0.8/mac/</a> )	2004–2006
		<b>73.0.1 (x64)</b> ( <a href="https://archive.mozilla.org/pub/firefox/releases/73.0.1/linux-x86_64/">https://archive.mozilla.org/pub/firefox/releases/73.0.1/linux-x86_64/</a> ) <sup>[131]</sup>	2011–

	68.5.0esr (x64) ( <a href="https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/linux-x86_64/">https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/linux-x86_64/</a> ) <sup>[132]</sup>	
	<b>73.0.1 (IA-32)</b> ( <a href="https://archive.mozilla.org/pub/firefox/releases/73.0.1/linux-i686/">https://archive.mozilla.org/pub/firefox/releases/73.0.1/linux-i686/</a> )	2004–
	68.5.0esr (IA-32) ( <a href="https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/linux-i686/">https://archive.mozilla.org/pub/firefox/releases/68.5.0esr/linux-i686/</a> )	

**Legend:** ■ Old version ■ Older version, still maintained ■ Latest version

## Notes

- In March 2014, the Windows Store app version of Firefox was cancelled, although there is a beta release.<sup>[140]</sup>
- SSE2 instruction set support is required for 53.0 and later, IA-32 support only applies to superscalar processors.

Firefox source code may be compiled for various operating systems; however, officially distributed binaries are provided for the following:

Required hardware and software<sup>[141]</sup>

Requirement	Microsoft Windows	Linux desktop	macOS	Android <sup>[142]</sup>	iOS
<b>CPU</b>	Pentium 4 or newer with <u>SSE2</u> <sup>[143]</sup>		Any x86-64 CPU <sup>[143]</sup>	ARM and IA-32 <sup>[143]</sup>	ARM
<b>Memory (RAM)</b>	512 MB for the 32-bit version and 2 GB for the 64-bit version			384 MB	?
<b>Data storage device free space</b>	200 MB			50 MB	?
<b>Operating system</b>	Windows 7 or later Server 2008 R2 or later <sup>[141]</sup>	<b>Minimum</b> <ul style="list-style-type: none"> <li>GTK+ 3.4 or newer<sup>[144]</sup></li> <li>GLib 2.22 or newer</li> <li>Pango 1.22 or newer</li> <li>libstdc++ 4.6.1 or newer</li> <li>X.Org 1.0 or newer</li> </ul> <b>Recommended</b> <ul style="list-style-type: none"> <li>NetworkManager 0.7 or newer</li> <li>DBus 1.0 or newer</li> <li>GNOME 2.16 or newer</li> <li>PulseAudio</li> <li>X.Org 1.7 or newer</li> </ul>	OS X 10.9 or newer	4.1 or newer <sup>[142]</sup>	11.4 or later <sup>[145]</sup>

## Microsoft Windows

Firefox 1.0 was released for Windows 9x, as well as Windows NT 4.0 and later. Some users reported the 1.x builds were operable (but not installable) on Windows NT 3.51.<sup>[146]</sup>

In September 2013, a Metro-style version of Firefox optimized for touchscreen use was introduced on the "Aurora" release channel. However, the project has since been cancelled as of March 2014, with Mozilla citing a lack of user adoption of the beta versions.<sup>[147][148][149]</sup>

Version 43.0 included the first x64 builds, made for Windows 7 and Server 2008 R2.<sup>[150]</sup> Version 49.0 dropped support for processors without the SSE2 instruction set on Windows.

In April 2017, users of Firefox 52.0.2 on Windows XP, Windows Vista, Windows Server 2003 and Windows Server 2008 who had automatic updates enabled were migrated to Firefox 52 ESR. The support was projected to end for these operating systems with the last release in June 2018.<sup>[151]</sup>

## macOS

The first official release (Firefox version 1.0) supported macOS (then called Mac OS X) on the PowerPC architecture. Mac OS X builds for the IA-32 architecture became available via a universal binary which debuted with Firefox 1.5.0.2 in 2006.

Starting with version 4.0, Firefox was released for the x64 architecture to which macOS had migrated.<sup>[152]</sup>

## Linux

Since its inception, Firefox for Linux supported the 32-bit memory architecture of the IA-32 instruction set. 64-bit builds were introduced in the 4.0 release.<sup>[152]</sup> The 46.0 release replaced GTK+ 2.18 with 3.4 as a system requirement on Linux and other systems running X.Org.<sup>[153]</sup> Starting with 53.0, the 32-bit builds require the SSE2 instruction set.

## Firefox for mobile

Firefox for Android, codenamed Fennec, is a web browser for smaller non-PC devices, mobile phones, and PDAs. It was originally first released for the Nokia Maemo operating system, specifically the Nokia N900, on January 28, 2010.<sup>[154]</sup> On March 29, 2011, besides Maemo, Version 4 was added for Android.<sup>[155]</sup> With the release of the mobile version, the browser's version number was bumped from 2 to 4, synchronizing it with all future desktop releases of Firefox because the rendering engines used in both browsers are the same.<sup>[156]</sup> Version 7 was the last release for Maemo on the N900.<sup>[157]</sup>

The user interface is completely redesigned and optimized for small screens, the controls are hidden away so that only the web content is shown on screen, and it uses touchscreen interaction methods. It includes the Awesome Bar, tabbed browsing, add-on support, password manager, location-aware browsing, and the ability to synchronize with the user's computer Firefox browser using Firefox Sync.<sup>[158]</sup>

In April 2013, then-Mozilla CEO Gary Kovacs said that Firefox would not come to iOS as long as Apple required the use of the WebKit layout engine to do so. One reason given by Mozilla was that prior to iOS 8, Apple had supplied third-party browsers with an inferior version of their JavaScript engine which hobbled their performance, making it impossible to match Safari's JavaScript performance on the iOS platform.<sup>[159]</sup> Apple later opened their "Nitro" JavaScript engine to third-

party browsers.<sup>[160]</sup> In 2015, Mozilla announced it was moving forward with Firefox for iOS, with a preview release made available in New Zealand in September of that year.<sup>[161][162][163]</sup> In November 2016, Firefox released a new iOS app titled Firefox Focus, a private web browser.<sup>[164]</sup>

Operating system		Latest stable version	Support status
Android (including Android-x86)	5.0 and later <sup>[165]</sup>	<b>68.5.0 (ARMv8-A)</b> ( <a href="https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-aarch64/">https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-aarch64/</a> )	2017–2020 <sup>[166]</sup>
	4.1 and later	<b>68.5.0 (x64)</b> ( <a href="https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-x86_64/">https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-x86_64/</a> ) <sup>[167]</sup>	2018–2020 <sup>[166]</sup>
		<b>68.5.0 (IA-32)</b> ( <a href="https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-x86/">https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-x86/</a> ) <sup>[167]</sup>	2013–2020 <sup>[166]</sup>
		<b>68.5.0 (ARMv7)</b> ( <a href="https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-api-16/">https://archive.mozilla.org/pub/mobile/releases/68.5.0/android-api-16/</a> )	2012–2020 <sup>[166]</sup>
	4.0	55.0.2 (IA-32) ( <a href="https://archive.mozilla.org/pub/mobile/releases/55.0.2/android-x86/">https://archive.mozilla.org/pub/mobile/releases/55.0.2/android-x86/</a> ) <sup>[167][168]</sup>	2013–2017
		55.0.2 (ARMv7) ( <a href="https://archive.mozilla.org/pub/mobile/releases/55.0.2/android-api-15/">https://archive.mozilla.org/pub/mobile/releases/55.0.2/android-api-15/</a> )	2011–2017
	3.0–3.2	45.0.2 (ARMv7) ( <a href="https://archive.mozilla.org/pub/mobile/releases/45.0.2/android-api-11/">https://archive.mozilla.org/pub/mobile/releases/45.0.2/android-api-11/</a> ) <sup>[167]</sup>	2011–2016
	2.3	47.0 (ARMv7) ( <a href="https://archive.mozilla.org/pub/mobile/releases/47.0/android-api-9/">https://archive.mozilla.org/pub/mobile/releases/47.0/android-api-9/</a> ) <sup>[167][169]</sup>	2011–2016
	2.2–4.3	31.3.0esr (ARMv6) ( <a href="https://archive.mozilla.org/pub/mobile/releases/31.3.0esr/android-armv6/">https://archive.mozilla.org/pub/mobile/releases/31.3.0esr/android-armv6/</a> )	2012–2015
	2.2	31.0 (ARMv7) ( <a href="https://archive.mozilla.org/pub/mobile/releases/31.0/android/">https://archive.mozilla.org/pub/mobile/releases/31.0/android/</a> ) <sup>[170]</sup>	2011–2014
	2.1	19.0.2 (ARMv6) ( <a href="https://archive.mozilla.org/pub/mobile/releases/19.0.2/android-armv6/">https://archive.mozilla.org/pub/mobile/releases/19.0.2/android-armv6/</a> )	2012–2013
		19.0.2 (ARMv7) ( <a href="https://archive.mozilla.org/pub/mobile/releases/19.0.2/android/">https://archive.mozilla.org/pub/mobile/releases/19.0.2/android/</a> )	2011–2013
	2.0	6.0.2 (ARMv7) ( <a href="https://archive.mozilla.org/pub/mobile/releases/6.0.2/android/">https://archive.mozilla.org/pub/mobile/releases/6.0.2/android/</a> )	2011
Firefox OS	2.2	35/36/37 ( <a href="https://developer.mozilla.org/en-US/docs/Archive/B2G_OS/Releases/2.2">https://developer.mozilla.org/en-US/docs/Archive/B2G_OS/Releases/2.2</a> )	2015
	2.1	33/34 ( <a href="https://developer.mozilla.org/en-US/docs/Archive/B2G_OS/Releases/2.1">https://developer.mozilla.org/en-US/docs/Archive/B2G_OS/Releases/2.1</a> )	2014–2015
	2.0	31/32 ( <a href="https://developer.mozilla.org/en-US/docs/Archive/B2G_OS/Releases/2.0">https://developer.mozilla.org/en-US/docs/Archive/B2G_OS/Releases/2.0</a> )	2014–2015
Maemo		7.0 ( <a href="https://archive.mozilla.org/pub/mobile/releases/7.0/maemo/">https://archive.mozilla.org/pub/mobile/releases/7.0/maemo/</a> )	2010–2011

**Legend:**  Old version  Older version, still maintained  **Latest version**

## Notes

- Firefox for iOS is not listed in this table as its version numbers would be misleading; it uses version numbers that do not correspond to any of the other Firefox versions. Those share a core component, the Gecko rendering engine, and track its version numbers, whereas the version for

the iOS operating system uses the operating system's rendering engine (WebKit), rather than Mozilla's (Gecko).

## Unofficial ports

Firefox has also been ported to FreeBSD,<sup>[171]</sup> NetBSD,<sup>[172]</sup> OpenBSD,<sup>[173]</sup> OpenIndiana,<sup>[174]</sup> OS/2,<sup>[175]</sup> SkyOS and BeOS/Haiku,<sup>[176][177][178][179]</sup> and an unofficial rebranded version called Timberwolf has been available for AmigaOS 4. An unofficial continuation of the Mac OS X PowerPC release continues as TenFourFox.

The Firefox port for OpenBSD is maintained by Landry Breuil since 2010. Firefox is regularly built for the current branch of the operating system, the latest versions are packaged for each release and remain frozen until the next release. In 2017, Landry began hosting packages of newer Firefox versions for OpenBSD releases from 6.0 onwards, making them available to installations without the ports system.<sup>[180]</sup>

The Solaris port of Firefox (including OpenSolaris) was maintained by the Oracle Solaris Desktop Beijing Team,<sup>[181][182]</sup> until March 2017 when the team was disbanded.<sup>[183]</sup> There was also an unofficial port of Firefox 3.6.x to IBM AIX<sup>[184][185]</sup> and of v1.7.x to UnixWare.<sup>[186]</sup>

Operating system		Latest stable version	Support status
Solaris	10–11 and OpenSolaris	<a href="https://github.com/oracle/solaris-userland/tree/master/components/desktop/firefox">68.5.0esr (IA-32/x64, SPARC V9)</a> ( <a href="https://github.com/oracle/solaris-userland/tree/master/components/desktop/firefox">https://github.com/oracle/solaris-userland/tree/master/components/desktop/firefox</a> )	2005–
	8–9	<a href="https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/contrib/">2.0.0.20 (IA-32, SPARC V9)</a> ( <a href="https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/contrib/">https://archive.mozilla.org/pub/firefox/releases/2.0.0.20/contrib/</a> )	2004–2008
HP-UX	11i v2–v3	3.5.9 (IA-64, PA-RISC) <sup>[187]</sup>	N/A
FreeBSD (DragonFly BSD)	12	<b>73.0 (IA-32)</b> ( <a href="http://pkg.freebsd.org/FreeBSD:12:i386/latest/All/">http://pkg.freebsd.org/FreeBSD:12:i386/latest/All/</a> ) and <b>73.0 (x64)</b> ( <a href="http://pkg.freebsd.org/FreeBSD:12:amd64/latest/All/">http://pkg.freebsd.org/FreeBSD:12:amd64/latest/All/</a> )	2018–
		68.5.0esr (IA-32) ( <a href="http://pkg.freebsd.org/FreeBSD:12:i386/latest/All/">http://pkg.freebsd.org/FreeBSD:12:i386/latest/All/</a> ) and 68.5.0esr (x64) ( <a href="http://pkg.freebsd.org/FreeBSD:12:amd64/latest/All/">http://pkg.freebsd.org/FreeBSD:12:amd64/latest/All/</a> )	
	11	<b>73.0 (IA-32)</b> ( <a href="http://pkg.freebsd.org/FreeBSD:11:i386/latest/All/">http://pkg.freebsd.org/FreeBSD:11:i386/latest/All/</a> ) and <b>73.0 (x64)</b> ( <a href="http://pkg.freebsd.org/FreeBSD:11:amd64/latest/All/">http://pkg.freebsd.org/FreeBSD:11:amd64/latest/All/</a> )	2016–
		68.5.0esr (IA-32) ( <a href="http://pkg.freebsd.org/FreeBSD:11:i386/latest/All/">http://pkg.freebsd.org/FreeBSD:11:i386/latest/All/</a> ) and 68.5.0esr (x64) ( <a href="http://pkg.freebsd.org/FreeBSD:11:amd64/latest/All/">http://pkg.freebsd.org/FreeBSD:11:amd64/latest/All/</a> )	
OpenBSD	6.6	68.5.0esr (IA-32, x64) ( <a href="https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/firefox-esr/Makefile">https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/firefox-esr/Makefile</a> )	2019–
		69.0.2 (ARMv8-A) ( <a href="https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/mozilla-firefox/Makefile">https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/mozilla-firefox/Makefile</a> )	2019
	5.8	38.7.1esr (PPC) ( <a href="https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/firefox-esr/Makefile">https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/firefox-esr/Makefile</a> )	2015–2016
	5.7	31.6.0esr (SPARC V9) ( <a href="https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/firefox-esr/Makefile">https://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/firefox-esr/Makefile</a> )	2015
	5.1	3.6.25 (Alpha) ( <a href="https://ftp.eu.openbsd.org/pub/OpenBSD/5.1/packages/alpha/">https://ftp.eu.openbsd.org/pub/OpenBSD/5.1/packages/alpha/</a> )	N/A (packaged after version was superseded)

**Legend:**  Old version  Older version, still maintained  Latest version

## Gallery



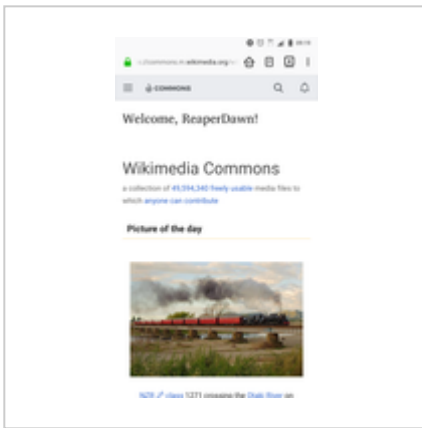
Firefox 68 running on Windows 10



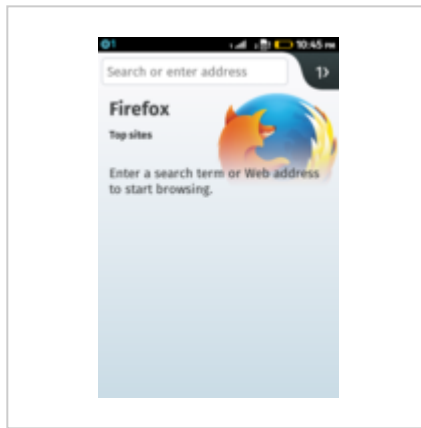
Firefox 57 on macOS High Sierra



Firefox Developer Edition 70.0b3 on Arch Linux



Firefox for Android 62 on Android



Firefox on Firefox OS



Firefox on MeeGo OS

## Experimental builds and ESR

Besides official releases, Mozilla provides development builds of Firefox in distribution channels named, in order of most to least stable, "Beta", "Developer Edition" (formerly "Aurora", renamed on November 10, 2014<sup>[188][189]</sup>), and "Nightly".<sup>[190]</sup> Starting from Firefox 54, "Developer Edition" is based on the "Beta" build.<sup>[191]</sup>

**Firefox ESR** (Extended Support Release) is a version of Firefox for organizations and other groups that need extended support for mass deployments. Each ESR release, based on the regular version released at the same time, is supported for approximately one year.<sup>[192]</sup> Unlike the regular ("rapid") releases, ESRs are not updated with new features and performance enhancements every six weeks, but rather are updated with only high-risk-reduction or high-impact security fixes or major stability fixes with point releases, until the end of the ESR cycle.<sup>[193]</sup>

## Licensing



Firefox source code is free software, with most of it being released under the Mozilla Public License (MPL) version 2.0.<sup>[23]</sup> This license permits anyone to view, modify, or redistribute the source code. As a result, several publicly released applications have been built from it, such as Netscape, Flock, Miro, GNU IceCat, Iceweasel, Songbird, Pale Moon, Waterfox, and Comodo IceDragon.

In the past, Firefox was licensed solely under the MPL, then version 1.1,<sup>[194]</sup> which the Free Software Foundation criticized for being weak copyleft, as the license permitted, in limited ways, proprietary derivative works. Additionally, code only licensed under MPL 1.1 could not legally be linked with code under the GPL.<sup>[195][196]</sup> To address these concerns, Mozilla re-licensed most of Firefox under the tri-license scheme of MPL 1.1, GPL 2.0, or LGPL 2.1. Since the re-licensing, developers were free to choose the license under which they received most of the code, to suit their intended use: GPL or LGPL linking and derivative works when one of those licenses is chosen, or MPL use (including the possibility of proprietary derivative works) if they chose the MPL.<sup>[194]</sup> However, on January 3, 2012, Mozilla released the GPL-compatible MPL 2.0,<sup>[197]</sup> and with the release of Firefox 13 on June 5, 2012, Mozilla used it to replace the tri-licensing scheme.<sup>[198]</sup>

The crash reporting service was initially closed-source, but switched with version 3 from a program called Talkback to the open-source Breakpad (and Socorro server).

## Trademark and logo

The name "Mozilla Firefox" is a registered trademark; along with the official Firefox logo, it may only be used under certain terms and conditions. Anyone may redistribute the official binaries in unmodified form and use the Firefox name and branding for such distribution, but restrictions are placed on distributions which modify the underlying source code.<sup>[199]</sup> The name "Firefox" derives from a nickname of the red panda.<sup>[51]</sup>

Mozilla has placed the Firefox logo files under open-source licenses,<sup>[200][201]</sup> but its trademark guidelines do not allow displaying altered<sup>[202]</sup> or similar logos<sup>[203]</sup> in contexts where trademark law applies.

There has been some controversy over the Mozilla Foundation's intentions in stopping certain open-source distributions from using the "Firefox" trademark.<sup>[24]</sup> Open-source browsers "enable greater choice and innovation in the market rather than aiming for mass-market domination."<sup>[204]</sup> Mozilla Foundation Chairperson Mitchell Baker explained in an interview in 2007 that distributions could freely use the Firefox trademark if they did not modify source code, and that the Mozilla Foundation's only concern was with users getting a consistent experience when they used "Firefox".<sup>[205]</sup>



Logo used for Iceweasel

To allow distributions of the code *without* using the official branding, the Firefox build system contains a "branding switch". This switch, often used for alphas ("Auroras") of future Firefox versions, allows the code to be compiled without the official logo and name, and can allow a derivative work unencumbered by restrictions on the Firefox trademark to be produced. In the unbranded build the trademarked logo and name are replaced with a freely distributable generic globe logo and the name of the release series from which the modified version was derived.

Distributing modified versions of Firefox under the "Firefox" name required explicit approval from Mozilla for the changes made to the underlying code, and required the use of *all* of the official branding. For example, it was not permissible to use the name "Firefox" without also using the official logo. When the Debian project decided to stop using the official Firefox logo in 2006 (because Mozilla's copyright restrictions at the time were incompatible with Debian's guidelines), they were told by a representative of the Mozilla Foundation that this was not acceptable, and were asked either to comply with the published trademark guidelines or cease using the "Firefox" name in their distribution.<sup>[206]</sup> Ultimately, Debian switched to branding their modified version of Firefox "Iceweasel" (but in 2016 switched back to Firefox), along with other Mozilla software. GNU IceCat is another derived version of Firefox distributed by the GNU Project, which maintains its own separate branding.<sup>[207]</sup>

## Branding and visual identity

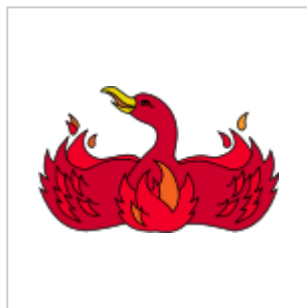
The Firefox icon is a trademark used to designate the official Mozilla build of the Firefox software and builds of official distribution partners.<sup>[208]</sup> For this reason software distributors who distribute modified versions of Firefox do not use the icon.

Early Firebird and Phoenix releases of Firefox were considered to have reasonable visual designs, but fell short when compared to many other professional software packages. In October 2003, professional interface designer Steven Garrity wrote an article covering everything he considered to be wrong with Mozilla's visual identity.<sup>[209]</sup>

Shortly afterwards, the Mozilla Foundation invited Garrity to head up the new visual identity team. The release of Firefox 0.8 in February 2004 saw the introduction of the new branding efforts. Included were new icon designs by silverorange, a group of web developers with a long-standing relationship with Mozilla. The final renderings are by Jon Hicks, who had worked on Camino.<sup>[210][211]</sup> The logo was later revised and updated, fixing several flaws found when it was enlarged.<sup>[212]</sup> The animal shown in the logo is a stylized fox, although "firefox" is usually a common name for the red panda. The panda, according to Hicks, "didn't really conjure up the right imagery" and was not widely known.<sup>[211]</sup>

In June 2019, Mozilla unveiled a revised Firefox logo, which was officially implemented on version 70. The new logo is part of an effort to build a brand system around Firefox and its complimentary apps and services, which are now being promoted as a suite under the Firefox brand. The logo of the Firefox family uses only the flame component of the logo, and Firefox itself (whose logo was revised to evoke the new branding style) is now being referred to in some publicity material as "Firefox Browser".<sup>[213][214]</sup>

## Logo history



Logo of "Phoenix" and "Firebird" before being renamed as Firefox



Firefox 1.0 to 2.0 from 2004 to 2005



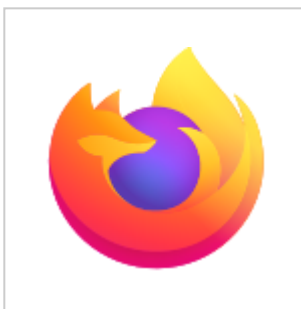
Firefox 3.5–22, from June 30, 2009 to June 25, 2013



Firefox 23–56, from August 6, 2013 to September 28, 2017<sup>[215]</sup>



Firefox 57–69, from November 14, 2017 to September 3, 2019



Firefox 70 and later, since October 22, 2019

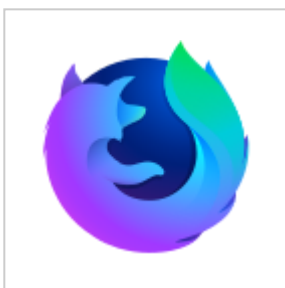
### Other logos, used for nightly versions



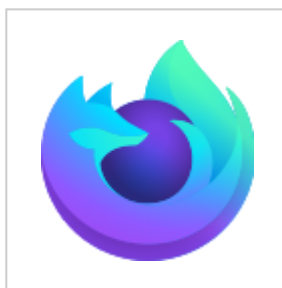
The 2011 Nightly logo, used to represent nightly builds of pre-alpha versions



The 2013 Nightly logo



The 2017 Nightly logo



The 2019 Nightly logo

### Other logos, used for developer/aurora versions



The 2011 Aurora logo, used to represent an alpha release



The 2013 Aurora logo



The 2015 Developer Edition logo



The 2017 Developer Edition logo



The 2019 Developer Edition logo

### Other logos



Blue globe artwork, distributed with the source code, and is explicitly not protected as a trademark<sup>[216]</sup>

## Promotion

Firefox was adopted rapidly, with 100 million downloads in its first year of availability.<sup>[217]</sup> This was followed by a series of aggressive marketing campaigns starting in 2004 with a series of events Blake Ross and Asa Dotzler called "marketing weeks".<sup>[218]</sup>

Firefox continued to heavily market itself by releasing a marketing portal dubbed "Spread Firefox" (SFX) on September 12, 2004.<sup>[219]</sup> It debuted along with the Firefox Preview Release, creating a centralized space for the discussion of various marketing techniques. The release of their manifesto stated that "the Mozilla project is a global community of people who believe that openness, innovation and opportunity are key to the continued health of the Internet."<sup>[204]</sup> A two-page ad in the edition of December 16 of *The New York Times*, placed by Mozilla Foundation in coordination with Spread Firefox, featured the names of the thousands of people worldwide who contributed to the Mozilla Foundation's fundraising campaign to support the launch of the Firefox 1.0 web browser.<sup>[220]</sup> SFX portal enhanced the "Get Firefox" button program, giving users "referrer points" as an incentive. The site lists the top 250 referrers. From time to time, the SFX team or SFX members launch marketing events organized at the Spread Firefox website. As a part of the Spread Firefox campaign, there was an attempt to break the world download record with the release of Firefox 3.<sup>[221]</sup> This resulted in an official certified Guinness world record, with over eight million downloads.<sup>[222]</sup> In February 2011, Mozilla announced that it would be retiring Spread Firefox (SFX). Three months later, in May 2011, Mozilla officially closed Spread Firefox. Mozilla wrote that "there are currently plans to create a new iteration of this website [Spread Firefox] at a later date."<sup>[223]</sup>



Firefox mascot at the FISL 16 (2015), Brazil

In celebration of the third anniversary of the founding of the Mozilla Foundation, the "World Firefox Day" campaign was established on July 15, 2006,<sup>[224][225]</sup> and ran until September 15, 2006.<sup>[226]</sup> Participants registered themselves and a friend on the website for nomination to have their names displayed on the Firefox Friends Wall, a digital wall that was displayed at the headquarters of the Mozilla Foundation.

The Firefox community has also engaged in the promotion of their web browser. In 2006, some of Firefox's contributors from Oregon State University made a crop circle of the Firefox logo in an oat field near Amity, Oregon, near the intersection of Lafayette Highway and Walnut Hill Road.<sup>[227]</sup> After Firefox reached 500 million downloads on February 21, 2008, the Firefox community celebrated by visiting Freerice to earn 500 million grains of rice.<sup>[228]</sup>

Other initiatives included Live Chat, a service Mozilla launched in 2007 that allowed users to seek technical support from volunteers.<sup>[229]</sup> The service was later retired.<sup>[230]</sup>

To promote the launch of Firefox Quantum in November 2017, Mozilla partnered with Reggie Watts to produce a series of TV ads and social media content.<sup>[231]</sup>

## Performance

In December 2005, *Internet Week* ran an article in which many readers reported high memory usage in Firefox 1.5.<sup>[232]</sup> Mozilla developers said that the higher memory use of Firefox 1.5 was at least partially due to the new fast backwards-and-forwards (FastBack) feature.<sup>[233]</sup> Other known causes of memory problems were malfunctioning extensions such as Google Toolbar and some older versions of

AdBlock,<sup>[234]</sup> or plug-ins, such as older versions of Adobe Acrobat Reader.<sup>[235]</sup> When *PC Magazine* in 2006 compared memory usage of Firefox 2, Opera 9, and Internet Explorer 7, they found that Firefox used approximately as much memory as each of the other two browsers.<sup>[236]</sup>

Softpedia noted that Firefox 1.5 took longer to start up than other browsers,<sup>[237]</sup> which was confirmed by further speed tests.<sup>[238]</sup>

Internet Explorer 6 launched more swiftly than Firefox 1.5 on Windows XP since many of its components were built into the OS and loaded during system startup. As a workaround for the issue, a preloader application was created that loaded components of Firefox on startup, similar to Internet Explorer.<sup>[239]</sup> A Windows Vista feature called SuperFetch performs a similar task of preloading Firefox if it is used often enough.

Tests performed by *PC World* and Zimbra in 2006 indicated that Firefox 2 used less memory than Internet Explorer 7.<sup>[240][241]</sup> Firefox 3 used less memory than Internet Explorer 7, Opera 9.50 Beta, Safari 3.1 Beta, and Firefox 2 in tests performed by Mozilla, CyberNet, and The Browser World.<sup>[242][243][244]</sup> In mid-2009, BetaNews benchmarked Firefox 3.5 and declared that it performed "nearly ten times better on XP than Microsoft Internet Explorer 7".<sup>[245]</sup>

In January 2010, Lifehacker compared the performance of Firefox 3.5, Firefox 3.6, Google Chrome 4 (stable and Dev versions), Safari 4, and Opera (10.1 stable and 10.5 pre-alpha versions). Lifehacker timed how long browsers took to start and reach a page (both right after boot-up and after running at least once already), timed how long browsers took to load nine tabs at once, tested JavaScript speeds using Mozilla's Dromaeo online suite (which implements Apple's SunSpider and Google's V8 tests) and measured memory usage using Windows 7's process manager. They concluded that Firefox 3.5 and 3.6 were the fifth- and sixth-fastest browsers, respectively, on startup, 3.5 was third- and 3.6 was sixth-fastest to load nine tabs at once, 3.5 was sixth- and 3.6 was fifth-fastest on the JavaScript tests. They also concluded that Firefox 3.6 was the most efficient with memory usage followed by Firefox 3.5.<sup>[246]</sup>

In February 2012, *Tom's Hardware* performance tested Chrome 17, Firefox 10, Internet Explorer 9, Opera 11.61, and Safari 5.1.2 on Windows 7. *Tom's Hardware* summarized their tests into four categories: Performance, Efficiency, Reliability, and Conformance. In the performance category they tested HTML5, Java, JavaScript, DOM, CSS 3, Flash, Silverlight, and WebGL (WebGL 2 is current as of version 51; and Java and Silverlight stop working as of version 52)—they also tested start up time and page load time. The performance tests showed that Firefox was either "acceptable" or "strong" in most categories, winning three categories (HTML5, HTML5 hardware acceleration, and Java) only finishing "weak" in CSS performance. In the efficiency tests, *Tom's Hardware* tested memory usage and management. In this category, it determined that Firefox was only "acceptable" at performing light memory usage, while it was "strong" at performing heavy memory usage. In the reliability category, Firefox performed a "strong" amount of proper page loads. In the final category, conformance, it was determined that Firefox had "strong" conformance for JavaScript and HTML5. In conclusion, *Tom's Hardware* determined that Firefox was the best browser for Windows 7 OS, but that it only narrowly beat Google Chrome.<sup>[247]</sup>

In June 2013, *Tom's Hardware* again performance tested Firefox 22, Chrome 27, Opera 12, and Internet Explorer 10. They found that Firefox slightly edged out the other browsers in their "performance" index, which examined wait times, JavaScript execution speed, HTML5/CSS3

rendering, and hardware acceleration performance. Firefox also scored the highest on the "non-performance" index, which measured memory efficiency, reliability, security, and standards conformance, finishing substantially ahead of Chrome, the runner-up. *Tom's Hardware* concluded by declaring Firefox the "sound" winner of the performance benchmarks.<sup>[248]</sup>

In January 2014, a benchmark testing the memory usage of Firefox 29, Google Chrome 34, and Internet Explorer 11 indicated that Firefox used the least memory when a substantial number of tabs were open.<sup>[249]</sup>

In benchmark testing in early 2015 on a "high-end" Windows machine, comparing Microsoft Edge, Internet Explorer, Firefox, Chrome, and Opera, Firefox achieved the highest score on three of the seven tests. Four different Javascript performance tests gave conflicting results. Firefox bested the others on the Peacekeeper benchmark, but was behind the Microsoft products when tested with SunSpider. Measured with Mozilla's Kraken, it came second place to Chrome, while on Google's Octane challenge it took third behind Chrome and Opera. Firefox took the lead with WebXPRT, which runs several typical HTML5 and Javascript tasks. Firefox, Chrome, and Opera all achieved the highest possible score on the Oort Online test, measuring WebGL rendering speed (WebGL 2 is now current). In terms of HTML5 compatibility testing, Firefox was ranked in the middle of the group.<sup>[250]</sup>

A similar set of benchmark tests in 2016 showed Firefox's Javascript performance on Kraken and the newer Jetstream tests trailing slightly behind all other tested browsers except Internet Explorer (IE), which performed relatively poorly. On Octane, Firefox came ahead of IE and Safari, but again slightly behind the rest, including Vivaldi and Microsoft Edge. Edge took overall first place on the Jetstream and Octane benchmarks.<sup>[251]</sup>

As of the adoption of Firefox 57 and Mozilla's Quantum project entering production browsers in November 2017, Firefox was tested to be faster than Chrome in independent JavaScript tests, and demonstrated to use less memory with many browser tabs opened.<sup>[252][253]</sup> TechRadar rated it as the fastest web browser in a May 2019 report.<sup>[254]</sup>

## Market adoption

---

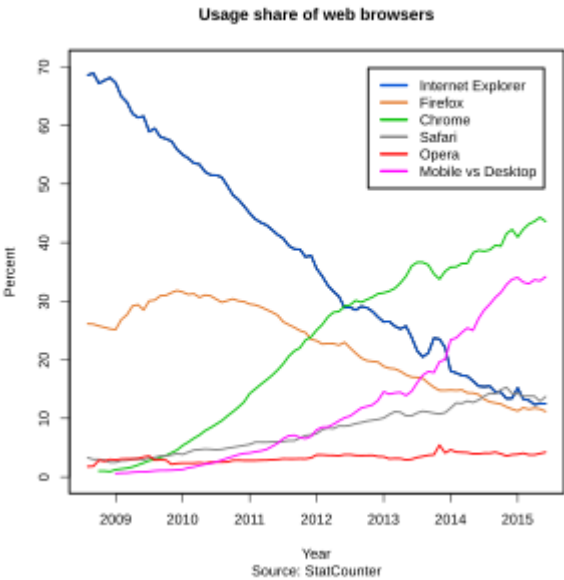
Downloads have continued at an increasing rate since Firefox 1.0 was released on November 9, 2004, and as of 31 July 2009 Firefox had already been downloaded over one billion times.<sup>[255]</sup> This number does not include downloads using software updates or those from third-party websites.<sup>[256]</sup> They do not represent a user count, as one download may be installed on many machines, one person may download the software multiple times, or the software may be obtained from a third-party.

In July 2010, IBM asked all employees (about 400,000) to use Firefox as their default browser.<sup>[257]</sup>

Firefox was the second-most used web browser until November 2011, when Google Chrome surpassed it.<sup>[258]</sup> According to Mozilla, Firefox has more than 450 million users as of October 2012.<sup>[35][259]</sup>

As of September 2019, Firefox was the second-most widely used desktop browser, and that position makes it the third-most popular with approximately 4.44% of worldwide usage share of web browsers across all platforms.<sup>[260]</sup>





Usage share of web browsers according to StatCounter

Desktop/laptop browser statistics	
Google Chrome	68.84%
<b>Mozilla Firefox</b>	9.44%
Safari	9.03%
Microsoft Edge	4.6%
Internet Explorer	3.56%
Others	4.54%
Desktop web browser market share according to StatCounter for December 2019 <sup>[261]</sup>	

For a while Internet Explorer (IE) and its successor Edge were more popular than Firefox combined, but with the decline of IE's share they are no longer and Edge is more popular than IE, which used to dominate.

According to the Firefox Public Data report by Mozilla, the active monthly count of Desktop clients has decreased from around 310 million in 2017 to 260 million in 2019.<sup>[262]</sup>

Firefox has had much success in some countries and continues to have it; as of September 2019, it is the most popular browser on traditional PCs in e.g. Eritrea and Cuba, with 78.15%<sup>[263]</sup> and 68.19%<sup>[264]</sup> of the market share, respectively.

See also

- FUEL (Firefox User Extension Library)
- History of the web browser
- List of free and open-source software packages
- Mozilla Prism
- XULRunner

## References

1. Gilbertson, Scott (September 24, 2012). "Happy Birthday, Firefox: The Little Web Browser That Could Turns 10" (<https://www.wired.com/2012/09/happy-birthday-firefox-the-little-web-browser-that-could-turns-10/>). *Wired*. Archived (<https://web.archive.org/web/20170805143306/https://www.wired.com/2012/09/happy-birthday-firefox-the-little-web-browser-that-could-turns-10/>) from the original on August 5, 2017. Retrieved September 20, 2019.
2. "Firefox 73.0.1, See All New Features, Updates and Fixes" (<https://www.mozilla.org/en-US/firefox/73.0.1/releasesnotes/>). *mozilla.org*. Mozilla Foundation. February 18, 2020.
3. "Firefox ESR 68.5.0, See All New Features, Updates and Fixes" (<https://www.mozilla.org/en-US/firefox/68.5.0/releasesnotes/>). *mozilla.org*. Mozilla Foundation. February 11, 2020.
4. "Firefox Beta Release Notes" (<https://www.mozilla.org/en-US/firefox/74.0beta/releasesnotes/>). Retrieved February 12, 2020.
5. "Mozilla Firefox Web Browser — Download Firefox Beta in your language — Mozilla" (<https://www.mozilla.org/en-US/firefox/beta/all/>). Retrieved February 12, 2020.
6. "See what landed recently in Firefox Nightly!" (<https://www.mozilla.org/en-US/firefox/75.0a1/releasesnotes/>). Retrieved February 12, 2020.
7. "Mozilla Firefox Web Browser — Download Firefox Nightly in your language — Mozilla" (<https://www.mozilla.org/en-US/firefox/nightly/all/>). Retrieved February 12, 2020.
8. Yegulalp, Serdar (February 3, 2017). "Mozilla binds Firefox's fate to the Rust language" (<https://www.infoworld.com/article/3165424/web-browsers/mozilla-binds-firefoxs-fate-to-the-rust-language.html>). *InfoWorld*. Archived (<https://web.archive.org/web/20170819063448/http://www.infoworld.com/article/3165424/web-browsers/mozilla-binds-firefoxs-fate-to-the-rust-language.html>) from the original on August 19, 2017. Retrieved August 19, 2017.
9. "FreeBSD ports" (<https://svnweb.freebsd.org/ports/head/www/firefox/>). Archived (<https://web.archive.org/web/20190323104221/https://svnweb.freebsd.org/ports/head/www/firefox/>) from the original on March 23, 2019. Retrieved March 24, 2018.
10. "OpenBSD ports" (<http://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/mozilla-firefox/>). Archived (<https://web.archive.org/web/20190120074628/http://cvsweb.openbsd.org/cgi-bin/cvsweb/ports/www/mozilla-firefox/>) from the original on January 20, 2019. Retrieved March 24, 2018.
11. "NetBSD pkgsrc" (<http://cvsweb.netbsd.org/bsdweb.cgi/pkgsrc/www/firefox/>). Archived (<https://web.archive.org/web/20181101015707/http://cvsweb.netbsd.org/bsdweb.cgi/pkgsrc/www/firefox/>) from the original on November 1, 2018. Retrieved October 31, 2018.
12. "OpenIndiana Wiki" (<https://wiki.openindiana.org/oi/Firefox>). Archived (<https://web.archive.org/web/20181101015421/https://wiki.openindiana.org/oi/Firefox>) from the original on November 1, 2018. Retrieved October 31, 2018.
13. "Joyent's pkgsrc for Illumos" (<https://pkgsrc.joyent.com/install-on-illumos/>). Archived (<https://web.archive.org/web/20181030015100/http://pkgsrc.joyent.com/install-on-illumos/>) from the original on October 30, 2018. Retrieved October 31, 2018.
14. "Open Source software in Solaris, Github" (<https://github.com/oracle/solaris-userland/tree/master/components/desktop/firefox>). Archived (<https://web.archive.org/web/20181231234544/https://github.com/oracle/solaris-userland/tree/master/components/desktop/firefox>) from the original on December 31, 2018. Retrieved October 31, 2018.
15. "Firefox ESR builds for Solaris" ([https://ftp.mozilla.org/pub/firefox/releases/52.0esr/contrib/solaris\\_pkgadd/README.txt](https://ftp.mozilla.org/pub/firefox/releases/52.0esr/contrib/solaris_pkgadd/README.txt)). Archived ([https://web.archive.org/web/20181101015711/https://ftp.mozilla.org/pub/firefox/releases/52.0esr/contrib/solaris\\_pkgadd/README.txt](https://web.archive.org/web/20181101015711/https://ftp.mozilla.org/pub/firefox/releases/52.0esr/contrib/solaris_pkgadd/README.txt)) from the original on November 1, 2018. Retrieved October 31, 2018.
16. "Latest Firefox Linux installer" (<https://download.mozilla.org/?product=firefox-latest&os=linux&lang=en-US>). Mozilla. Retrieved February 20, 2020.

17. "Latest Firefox Linux 64-bit installer" (<https://download.mozilla.org/?product=firefox-latest&os=linux64&lang=en-US>). Mozilla. Retrieved February 20, 2020.
18. "Latest Firefox OS X installer" (<https://download.mozilla.org/?product=firefox-latest&os=osx&lang=en-US>). Mozilla. Retrieved February 20, 2020.
19. "Latest Firefox Windows installer" (<https://download.mozilla.org/?product=firefox-latest&os=win&lang=en-US>). Mozilla. Retrieved February 20, 2020.
20. "Latest Firefox Windows 64-bit installer" (<https://download.mozilla.org/?product=firefox-latest&os=win64&lang=en-US>). Mozilla. Retrieved February 20, 2020.
21. "Mozilla Firefox release files" (<https://archive.mozilla.org/pub/firefox/releases/>). Mozilla. Archived (<https://web.archive.org/web/20191009133701/https://archive.mozilla.org/pub/firefox/releases/>) from the original on October 9, 2019. Retrieved October 22, 2019.
22. "Mozilla" (<https://www.mozilla.org/en-US/about/legal/eula/>). Archived (<https://web.archive.org/web/20141021035640/https://www.mozilla.org/en-US/about/legal/eula/>) from the original on October 21, 2014. Retrieved October 20, 2014.
23. *Mozilla Licensing Policies* (<https://www.mozilla.org/foundation/licensing.html>), mozilla.org, archived (<https://web.archive.org/web/20130402181908/http://www.mozilla.org/foundation/licensing.html>) from the original on April 2, 2013, retrieved January 5, 2012
24. "Debian and Mozilla – a study in trademarks" (<https://web.archive.org/web/20170801163012/http://lwn.net/Articles/118268/>). *LWN.net*. January 10, 2005. Archived from the original (<https://lwn.net/Articles/118268/>) on August 1, 2017. Retrieved September 14, 2011.
25. "Gecko Layout Engine" (<https://web.archive.org/web/20100615131607/http://download-firefox.org/spread-firefox/gecko-layout-engine-and-mozilla-firefox/>). download-firefox.org. July 17, 2008. Archived from the original (<http://download-firefox.org/spread-firefox/gecko-layout-engine-and-mozilla-firefox/>) on June 15, 2010. Retrieved May 10, 2012.
26. Mayo, Mark (November 14, 2017). "Introducing the New Firefox: Firefox Quantum" (<https://web.archive.org/web/20180627114050/https://blog.mozilla.org/blog/2017/11/14/introducing-firefox-quantum/>). *The Mozilla Blog*. Archived from the original (<https://blog.mozilla.org/blog/2017/11/14/introducing-firefox-quantum/>) on June 27, 2018. Retrieved May 26, 2018.
27. "Firefox browser takes on Microsoft" (<https://web.archive.org/web/20171220113953/http://news.bbc.co.uk/2/hi/technology/3993959.stm>). BBC News. November 9, 2004. Archived from the original (<http://news.bbc.co.uk/1/hi/technology/3993959.stm>) on December 20, 2017.
28. Weber, Tim (May 9, 2005). "The assault on software giant Microsoft" (<https://web.archive.org/web/20170925233936/http://news.bbc.co.uk/2/hi/business/4508897.stm>). BBC News. Archived from the original (<http://news.bbc.co.uk/1/hi/business/4508897.stm>) on September 25, 2017.
29. Jay, Paul (February 28, 2008). "Curtains for Netscape – Tech Bytes" (<http://www.cbc.ca/technology/technology-blog/2008/02/curtains-for-netscape.html>). CBC News. Archived (<https://web.archive.org/web/20150705110100/http://www.cbc.ca/technology/technology-blog/2008/02/curtains-for-netscape.html>) from the original on July 5, 2015. Retrieved June 26, 2015.
30. StatCounter. "StatCounter Global Stats – Browser, OS, Search Engine including Mobile Usage Share" (<https://gs.statcounter.com/#browser-ww-monthly-200807-201609>). *gs.statcounter.com*. Archived ([https://archive.today/20120526/http://gs.statcounter.com/%23mobile\\_browser-ww-monthly-201012-201111-bar#browser-ww-monthly-200807-201609](https://archive.today/20120526/http://gs.statcounter.com/%23mobile_browser-ww-monthly-201012-201111-bar#browser-ww-monthly-200807-201609)) from the original on May 26, 2012. Retrieved September 16, 2016.
31. "StatCounter Global Stats - Browser, OS, Search Engine including Mobile Usage Share" ([https://gs.statcounter.com/#browser\\_version-ww-weekly-200827-200951](https://gs.statcounter.com/#browser_version-ww-weekly-200827-200951)). *StatCounter Global Stats*. Archived ([https://archive.today/20120526/http://gs.statcounter.com/%23mobile\\_browser-ww-monthly-201012-201111-bar#browser\\_version-ww-weekly-200827-200951](https://archive.today/20120526/http://gs.statcounter.com/%23mobile_browser-ww-monthly-201012-201111-bar#browser_version-ww-weekly-200827-200951)) from the original on May 26, 2012. Retrieved July 14, 2018.

32. "StatCounter global stats – Top 12 browser versions" ([https://gs.statcounter.com/#browser\\_version-ww-monthly-200902-201006](https://gs.statcounter.com/#browser_version-ww-monthly-200902-201006)). StatCounter. Archived ([https://archive.today/20120526/http://gs.statcounter.com/%23mobile\\_browser-ww-monthly-201012-201111-bar#browser\\_version-ww-monthly-200902-201006](https://archive.today/20120526/http://gs.statcounter.com/%23mobile_browser-ww-monthly-201012-201111-bar#browser_version-ww-monthly-200902-201006)) from the original on May 26, 2012. Retrieved March 12, 2010.
33. "Desktop Browser Market Share Worldwide" (<https://gs.statcounter.com/browser-market-share/desktop/worldwide/>). *StatCounter Global Stats*. Retrieved February 11, 2020.
34. "Browser Market Share Worldwide" (<https://gs.statcounter.com/browser-market-share>). *StatCounter Global Stats*. Retrieved February 11, 2020.
35. "At a Glance" (<https://blog.mozilla.org/press/ata glance/>). *Mozilla Press Center*. Mozilla. Archived (<https://web.archive.org/web/20141204035522/http://blog.mozilla.org/press/ata glance/>) from the original on December 4, 2014. Retrieved December 7, 2014.
36. Goodger, Ben (February 6, 2006). "Where Did Firefox Come From?" (<https://web.archive.org/web/20110623034401/http://weblogs.mozillazine.org/ben/archives/009698.html>). *Inside Firefox*. MozillaZine Weblogs. Archived from the original (<http://weblogs.mozillazine.org/ben/archives/009698.html>) on June 23, 2011. Retrieved January 7, 2012.
37. Yeow, Cheah Chu (2005). *Firefox Secrets* (<https://books.google.com/books?id=sfciobmzOOcC>). SitePoint Pty Ltd. ISBN 978-0-9752402-4-3. Archived (<https://web.archive.org/web/20190323104230/https://books.google.com/books?id=sfciobmzOOcC>) from the original on March 23, 2019. Retrieved December 12, 2015.
38. Eich, Brendan; Hyatt, David (April 2, 2003). "mozilla development roadmap" (<https://www-archive.mozilla.org/roadmap/roadmap-02-Apr-2003.html>). Mozilla. Archived (<https://web.archive.org/web/20090410050040/http://www-archive.mozilla.org/roadmap/roadmap-02-Apr-2003.html>) from the original on April 10, 2009. Retrieved August 2, 2009.
39. "Phoenix 0.1 (Pescadero) release Notes and FAQ" (<https://web.archive.org/web/20030528145420/http://www.mozilla.org/projects/firebird/0.1-release-notes.html>). *mozilla.org*. May 28, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.1-release-notes.html>) on May 28, 2003. Retrieved February 26, 2018.
40. "Phoenix 0.2 (Santa Cruz) release Notes and FAQ" (<https://web.archive.org/web/20031203013057/http://www.mozilla.org/projects/firebird/0.2-release-notes.html>). *mozilla.org*. December 3, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.2-release-notes.html>) on December 4, 2003. Retrieved February 26, 2018.
41. "Phoenix 0.3 (Lucia) release Notes and FAQ" (<https://web.archive.org/web/20031203013057/http://www.mozilla.org/projects/firebird/0.3-release-notes.html>). *mozilla.org*. December 3, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.3-release-notes.html>) on December 4, 2003. Retrieved February 26, 2018.
42. "Phoenix 0.4 (Oceano) Release Notes and FAQ" (<https://web.archive.org/web/20031203013057/http://www.mozilla.org/projects/firebird/0.4-release-notes.html>). *mozilla.org*. December 3, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.4-release-notes.html>) on December 3, 2003. Retrieved February 26, 2018.
43. "Phoenix 0.5 (Naples) Release Notes and FAQ" (<https://web.archive.org/web/20031203013057/http://www.mozilla.org/projects/firebird/0.5-release-notes.html>). *mozilla.org*. December 3, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.5-release-notes.html>) on December 3, 2003. Retrieved February 26, 2018.
44. "Mozilla Firebird 0.6 Release Notes and FAQ" (<https://web.archive.org/web/20031203013057/http://www.mozilla.org/projects/firebird/0.6-release-notes.html>). *mozilla.org*. December 3, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.6-release-notes.html>) on December 3, 2003. Retrieved February 26, 2018.
45. "Mozilla Firebird 0.6.1 Release Notes and FAQ" (<https://web.archive.org/web/20031203013057/http://www.mozilla.org/projects/firebird/0.6.1-release-notes.html>). *mozilla.org*. December 3, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.6.1-release-notes.html>) on December 3, 2003. Retrieved February 26, 2018.

46. "Mozilla Firebird 0.7 Release Notes" (<https://web.archive.org/web/20031028041058/http://www.mozilla.org/projects/firebird/0.7-release-notes.html>). *mozilla.org*. October 28, 2003. Archived from the original (<https://www.mozilla.org/projects/firebird/0.7-release-notes.html>) on October 28, 2003. Retrieved February 26, 2018.
47. "Mozilla browser becomes Firebird" ([https://web.archive.org/web/20070914035447/http://www.ibphoenix.com/main.nfs?a=ibphoenix&page=ibp\\_Mozilla0](https://web.archive.org/web/20070914035447/http://www.ibphoenix.com/main.nfs?a=ibphoenix&page=ibp_Mozilla0)). IBPhoenix. Archived from the original ([http://www.ibphoenix.com/main.nfs?a=ibphoenix&page=ibp\\_Mozilla0](http://www.ibphoenix.com/main.nfs?a=ibphoenix&page=ibp_Mozilla0)) on September 14, 2007. Retrieved January 30, 2007.
48. Festa, Paul (May 7, 2003). "Mozilla's Firebird gets wings clipped" (<https://www.cnet.com/news/mozillas-firebird-gets-wings-clipped/>). CNET. Archived (<https://web.archive.org/web/20180629063203/https://www.cnet.com/news/mozillas-firebird-gets-wings-clipped/>) from the original on June 29, 2018. Retrieved January 30, 2007.
49. Festa, Paul (February 9, 2004). "Mozilla holds 'fire' in naming fight" (<https://www.cnet.com/news/mozilla-holds-fire-in-naming-fight/>). CNET. Archived (<https://web.archive.org/web/20180629063422/https://www.cnet.com/news/mozilla-holds-fire-in-naming-fight/>) from the original on June 29, 2018. Retrieved January 24, 2007.
50. "Red panda" ([https://web.archive.org/web/20140111062619/http://www.bbc.co.uk/nature/life/Red\\_Panda](https://web.archive.org/web/20140111062619/http://www.bbc.co.uk/nature/life/Red_Panda)). BBC Nature. Archived from the original ([https://www.bbc.co.uk/nature/life/Red\\_Panda](https://www.bbc.co.uk/nature/life/Red_Panda)) on January 11, 2014. Retrieved August 20, 2014.
51. Garrity, Steven; Markham, Gervase; Goodger, Ben; Decrem, Bart; et al. "Firefox name FAQ" (<https://web.archive.org/web/20120228204829/http://www.mozilla.org/projects/firefox/firefox-name-faq.html>). *mozilla.org*. Archived from the original (<https://www.mozilla.org/projects/firefox/firefox-name-faq.html>) on February 28, 2012. Retrieved March 13, 2012.
52. "Firefox 1.0 Release Notes" ([https://website-archive.mozilla.org/www.mozilla.org/firefox\\_releasenotes/en-US/firefox/releases/1.0.html](https://website-archive.mozilla.org/www.mozilla.org/firefox_releasenotes/en-US/firefox/releases/1.0.html)). *mozilla.org archive*. November 9, 2004. Archived ([https://web.archive.org/web/20180627005158/https://website-archive.mozilla.org/www.mozilla.org/firefox\\_releasenotes/en-US/firefox/releases/1.0.html](https://web.archive.org/web/20180627005158/https://website-archive.mozilla.org/www.mozilla.org/firefox_releasenotes/en-US/firefox/releases/1.0.html)) from the original on June 27, 2018. Retrieved June 26, 2018.
53. "Firefox 1.5 Release Notes" ([https://website-archive.mozilla.org/www.mozilla.org/firefox\\_releasenotes/en-US/firefox/releases/1.5.html#FAQ](https://website-archive.mozilla.org/www.mozilla.org/firefox_releasenotes/en-US/firefox/releases/1.5.html#FAQ)). *mozilla.org archive*. November 29, 2005. Archived ([https://web.archive.org/web/20141118131918/http://website-archive.mozilla.org/www.mozilla.org/firefox\\_releasenotes/en-US/firefox/releases/1.5.html#FAQ](https://web.archive.org/web/20141118131918/http://website-archive.mozilla.org/www.mozilla.org/firefox_releasenotes/en-US/firefox/releases/1.5.html#FAQ)) from the original on November 18, 2014. Retrieved November 17, 2014.
54. Shankland, Stephen (August 4, 2017). "Inside Mozilla: Firefox fights back" (<https://www.cnet.com/special-reports/mozilla-firefox-fights-back-against-google-chrome/>). CNET. CBS Interactive. Archived (<https://web.archive.org/web/20170803165258/https://www.cnet.com/special-reports/mozilla-firefox-fights-back-against-google-chrome/>) from the original on August 3, 2017. Retrieved October 9, 2017.
55. Dignan, Larry (August 6, 2017). "Why you should root for Mozilla's Firefox 57 in the browser wars" (<https://www.zdnet.com/article/why-you-should-root-for-mozillas-firefox-57-in-the-browser-wars/>). ZDNet. Archived (<https://web.archive.org/web/20171211021103/https://www.zdnet.com/article/why-you-should-root-for-mozillas-firefox-57-in-the-browser-wars/>) from the original on December 11, 2017. Retrieved October 9, 2017.
56. Keizer, Gregg (November 14, 2017). "Mozilla seeks return to glory with release of Firefox Quantum" (<https://www.computerworld.com/article/3237054/internet/mozilla-seeks-return-to-glory-with-release-of-firefox-quantum.html>). *Computerworld*. International Data Group. Archived (<https://web.archive.org/web/20171223114527/https://www.computerworld.com/article/3237054/internet/mozilla-seeks-return-to-glory-with-release-of-firefox-quantum.html>) from the original on December 23, 2017. Retrieved December 11, 2017.

57. Needham, Kev (May 4, 2019). "Update Regarding Add-ons in Firefox" (<https://blog.mozilla.org/addons/2019/05/04/update-regarding-add-ons-in-firefox/>). Mozilla. Archived (<https://web.archive.org/web/20190504142118/https://blog.mozilla.org/addons/2019/05/04/update-regarding-add-ons-in-firefox/>) from the original on May 4, 2019. Retrieved May 4, 2019.
58. Brinkmann, Martin (May 4, 2019). "Your Firefox extensions are all disabled? That's a bug!" (<https://www.ghacks.net/2019/05/04/your-firefox-extensions-are-all-disabled-thats-a-bug/>). GHacks. Archived (<https://web.archive.org/web/20190504065552/https://www.ghacks.net/2019/05/04/your-firefox-extensions-are-all-disabled-thats-a-bug/>) from the original on May 4, 2019. Retrieved May 4, 2019.
59. "Location-Aware Browsing" (<https://www.mozilla.com/firefox/geolocation/>). Mozilla Foundation. Retrieved July 5, 2009. (section "*What information is being sent, and to whom? (...)*")
60. Lardinois, Frederic (November 14, 2017). "Mozilla terminates its deal with Yahoo and makes Google the default in Firefox again" (<https://techcrunch.com/2017/11/14/mozilla-terminates-its-deal-with-yahoo-and-makes-google-the-default-in-firefox-again/>). *TechCrunch*. Archived (<https://web.archive.org/web/20171114211602/https://techcrunch.com/2017/11/14/mozilla-terminates-its-deal-with-yahoo-and-makes-google-the-default-in-firefox-again/>) from the original on November 14, 2017. Retrieved November 14, 2017.
61. Parrish, Kevin (August 5, 2016). "Hang up the phone: Mozilla to pull the plug on Firefox Hello in September" (<https://www.digitaltrends.com/computing/mozilla-firefox-hello-discontinue-september/>). *Digital Trends*. Archived (<https://web.archive.org/web/20170115104933/https://www.digitaltrends.com/computing/mozilla-firefox-hello-discontinue-september/>) from the original on January 15, 2017.
62. Villalobos, Jorge (August 10, 2017). "Upcoming Changes in Compatibility Features" (<https://blog.mozilla.org/addons/2017/08/10/upcoming-changes-compatibility/>). *Mozilla Add-ons Blog*. Archived (<https://web.archive.org/web/20171226113447/https://blog.mozilla.org/addons/2017/08/10/upcoming-changes-compatibility/>) from the original on December 26, 2017. Retrieved December 11, 2017.
63. Bright, Peter (August 21, 2015). "Mozilla sets plan to dump Firefox add-ons, move to Chrome-like extensions" (<https://arstechnica.com/information-technology/2015/08/mozilla-sets-plan-to-dump-firefox-add-ons-move-to-chrome-like-extensions/>). *Ars Technica*. Archived (<https://web.archive.org/web/20171201203245/https://arstechnica.com/information-technology/2015/08/mozilla-sets-plan-to-dump-firefox-add-ons-move-to-chrome-like-extensions/>) from the original on December 1, 2017. Retrieved December 11, 2017.
64. "Mozilla sets plan to dump Firefox add-ons, move to Chrome-like extensions" (<https://arstechnica.com/information-technology/2015/08/mozilla-sets-plan-to-dump-firefox-add-ons-move-to-chrome-like-extensions/>). *Ars Technica*. August 21, 2015. Archived (<https://web.archive.org/web/20150822085215/http://arstechnica.com/information-technology/2015/08/mozilla-sets-plan-to-dump-firefox-add-ons-move-to-chrome-like-extensions/>) from the original on August 22, 2015. Retrieved August 22, 2015.
65. "Social & Communication: Add-ons for Firefox" (<https://addons.mozilla.org/en-US/firefox/extensions/social-communication/>). *addons.mozilla.org*. Archived (<https://web.archive.org/web/20151203235652/https://addons.mozilla.org/en-US/firefox/extensions/social-communication/>) from the original on December 3, 2015. Retrieved November 16, 2015.
66. "SVG 2 support in Mozilla" ([https://developer.mozilla.org/en-US/docs/Web/SVG/SVG\\_2\\_support\\_in\\_Mozilla](https://developer.mozilla.org/en-US/docs/Web/SVG/SVG_2_support_in_Mozilla)). *MDN Web Docs*. Archived ([https://web.archive.org/web/20160920222508/https://developer.mozilla.org/en-US/docs/Web/SVG/SVG\\_2\\_support\\_in\\_Mozilla](https://web.archive.org/web/20160920222508/https://developer.mozilla.org/en-US/docs/Web/SVG/SVG_2_support_in_Mozilla)) from the original on September 20, 2016. Retrieved July 13, 2016.
67. "SVG in Firefox" ([https://developer.mozilla.org/en/SVG\\_in\\_Firefox](https://developer.mozilla.org/en/SVG_in_Firefox)). Archived ([https://web.archive.org/web/20080829121506/http://developer.mozilla.org/en/SVG\\_in\\_Firefox](https://web.archive.org/web/20080829121506/http://developer.mozilla.org/en/SVG_in_Firefox)) from the original on August 29, 2008. Retrieved September 30, 2007.

68. "CSS Reference: Mozilla Extensions – MDC" ([https://developer.mozilla.org/en/CSS\\_Reference/Mozilla\\_Extensions](https://developer.mozilla.org/en/CSS_Reference/Mozilla_Extensions)). Developer.mozilla.org. April 24, 2011. Archived ([https://web.archive.org/web/20110824232755/https://developer.mozilla.org/en/CSS\\_Reference/Mozilla\\_Extensions](https://web.archive.org/web/20110824232755/https://developer.mozilla.org/en/CSS_Reference/Mozilla_Extensions)) from the original on August 24, 2011. Retrieved August 17, 2011.
69. Mozilla Developer Center contributors (January 21, 2007). "Which open standards is the Gecko development project working to support, and to what extent does it support them?" ([https://developer.mozilla.org/en/Gecko\\_FAQ](https://developer.mozilla.org/en/Gecko_FAQ)). *Gecko FAQ*. Mozilla Developer Network. Archived ([https://web.archive.org/web/20080913104800/http://developer.mozilla.org/en/Gecko\\_FAQ](https://web.archive.org/web/20080913104800/http://developer.mozilla.org/en/Gecko_FAQ)) from the original on September 13, 2008. Retrieved January 24, 2007.
70. "WHATWG specification – Web Applications 1.0 – Working Draft. Client-side session and persistent storage" (<https://www.whatwg.org/specs/web-apps/current-work/#storage>). Web Hypertext Application Technology Working Group. February 7, 2007. Archived (<https://www.webcitation.org/6G2tLSqvy?url=http://www.whatwg.org/specs/web-apps/current-work/#storage>) from the original on April 21, 2013. Retrieved February 7, 2007.
71. Mozilla Developer Center contributors (September 30, 2007). "DOM:Storage" (<https://developer.mozilla.org/en/DOM/Storage>). Mozilla Developer Network. Archived (<https://web.archive.org/web/20080901163339/http://developer.mozilla.org/en/DOM/Storage>) from the original on September 1, 2008. Retrieved February 7, 2007.
72. Dumbill, Edd (December 6, 2005). "The future of HTML, Part 1: WHATWG" (<https://www.ibm.com/developerworks/xml/library/x-futhtml1/>). IBM. Archived (<https://web.archive.org/web/20071011142035/http://www.ibm.com/developerworks/xml/library/x-futhtml1/>) from the original on October 11, 2007. Retrieved January 24, 2007.
73. Fulton, Scott M. (December 20, 2007). "Latest Firefox beta passes Acid2 test, IE8 claims to pass also" (<http://www.betanews.com/article/Latest-Firefox-beta-passes-Acid2-test-IE8-claims-to-pass-also/1198178648>). BetaNews. Archived (<https://web.archive.org/web/20180628072328/https://betanews.com/2007/12/20/latest-firefox-beta-passes-acid2-test-ie8-claims-to-pass-also/>) from the original on June 28, 2018. Retrieved December 21, 2007.
74. Bailey, Daniel. "Why Firefox 4 Will Never Pass The Acid3 Test" (<https://web.archive.org/web/20110203005137/http://www.conceivablytech.com/5430/products/why-firefox-4-will-never-pass-the-acid3-test/>). Archived from the original (<http://www.conceivablytech.com/5430/products/why-firefox-4-will-never-pass-the-acid3-test/>) on February 3, 2011. Retrieved February 1, 2011.
75. Hickson, Ian (September 17, 2011). "Acid3 2011 Update" (<https://plus.google.com/107429617152575897589/posts/JdHnqpuUER4>). Archived (<https://web.archive.org/web/20111012170339/https://plus.google.com/107429617152575897589/posts/JdHnqpuUER4>) from the original on October 12, 2011. Retrieved September 17, 2011.
76. Perry, Douglas (September 20, 2011). "Acid3 Test Simplified; All Modern Browsers Score 100" (<https://www.tomsguide.com/us/acid3-browser-test-web-standard-compatibility-IE9,news-12583.html>). *Tom's Guide*. Purch Group. Archived (<https://web.archive.org/web/20180628015834/https://www.tomsguide.com/us/acid3-browser-test-web-standard-compatibility-IE9,news-12583.html>) from the original on June 28, 2018. Retrieved July 6, 2018.
77. "Phishing and Malware Protection" (<https://www.mozilla.com/firefox/phishing-protection/>). Mozilla Corp. How does Phishing and Malware Protection work in Firefox?. Retrieved November 29, 2009.
78. "Client specification for the Google Safe Browsing v2.1 protocol" (<https://code.google.com/p/google-safe-browsing/wiki/Protocolv2Spec>). Google Inc. Archived (<https://web.archive.org/web/20100211021242/http://code.google.com/p/google-safe-browsing/wiki/Protocolv2Spec>) from the original on February 11, 2010. Retrieved November 29, 2009. "Do not use this protocol without explicit written permission from Google. **Note:** This is not a license to use the defined protocol. [...]"



79. "Firefox 47.0, See All New Features, Updates and Fixes" (<https://www.mozilla.org/en-US/firefox/47.0/releasenotes/>). *Mozilla*. Archived (<https://web.archive.org/web/20160719121556/https://www.mozilla.org/en-US/firefox/47.0/releasenotes/>) from the original on July 19, 2016. Retrieved July 13, 2016.
80. "Watch DRM content on Firefox | Firefox Help" (<https://support.mozilla.org/en-US/kb/enable-drm>). *support.mozilla.org*. Archived (<https://web.archive.org/web/20150907004404/https://support.mozilla.org/en-US/kb/enable-drm>) from the original on September 7, 2015. Retrieved July 13, 2016.
81. "Mozilla To Test Widevine CDM in Firefox Nightly" (<https://blog.mozilla.org/futurereleases/2016/04/08/mozilla-to-test-widevine-cdm-in-firefox-nightly/>). April 8, 2016. Archived (<https://web.archive.org/web/20160607175843/https://blog.mozilla.org/futurereleases/2016/04/08/mozilla-to-test-widevine-cdm-in-firefox-nightly/>) from the original on June 7, 2016. Retrieved July 13, 2016.
82. Kirk, Jeremy (May 15, 2014). "Mozilla hates it, but streaming video DRM is coming to Firefox" (<https://www.pcworld.com/article/2155440/firefox-will-get-drm-copy-protection-despite-mozillas-concerns.html>). *PC World*. Archived (<https://web.archive.org/web/20180515132001/https://www.pcworld.com/article/2155440/firefox-will-get-drm-copy-protection-despite-mozillas-concerns.html>) from the original on May 15, 2018. Retrieved July 6, 2018.
83. Paul, Ian (May 13, 2015). "Firefox 38 arrives with contentious closed-source DRM integrated by default" (<https://www.pcworld.com/article/2922116/firefox-38-arrives-with-contentious-closed-source-drm-integrated-by-default.html>). *PC World*. Archived (<https://web.archive.org/web/20150802081751/http://www.pcworld.com/article/2922116/firefox-38-arrives-with-contentious-closed-source-drm-integrated-by-default.html>) from the original on August 2, 2015. Retrieved August 12, 2015.
84. Chesters, James (May 20, 2014). "Mixed reactions greet Mozilla plans to add HTML5 DRM in Firefox" (<https://www.infoq.com/news/2014/05/firefox-drm>). InfoQ. Archived (<https://web.archive.org/web/20190507011817/https://www.infoq.com/news/2014/05/firefox-drm>) from the original on May 7, 2019. Retrieved May 6, 2019.
85. "HTML5test - How well does your browser support HTML5?" (<https://alpha.html5test.com>). *html5test.com*. Archived (<https://web.archive.org/web/20190528225649/http://alpha.html5test.com/>) from the original on May 28, 2019. Retrieved October 13, 2019.
86. Ranganathan, Arun; Netscape Communications (November 11, 2002). "Bypassing Security Restrictions and Signing Code" ([https://developer.mozilla.org/en/Bypassing\\_Security\\_Restrictions\\_and\\_Signing\\_Code](https://developer.mozilla.org/en/Bypassing_Security_Restrictions_and_Signing_Code)). Mozilla Developer Network. Archived ([https://web.archive.org/web/20080917162645/http://developer.mozilla.org/en/Bypassing\\_Security\\_Restrictions\\_and\\_Signing\\_Code](https://web.archive.org/web/20080917162645/http://developer.mozilla.org/en/Bypassing_Security_Restrictions_and_Signing_Code)) from the original on September 17, 2008. Retrieved January 24, 2007.
87. "The Same Origin Policy" ([https://developer.mozilla.org/En/Same\\_origin\\_policy\\_for\\_JavaScript](https://developer.mozilla.org/En/Same_origin_policy_for_JavaScript)). Mozilla Developer Network. June 8, 2001. Archived ([https://web.archive.org/web/20081014022433/http://developer.mozilla.org/En/Same\\_origin\\_policy\\_for\\_JavaScript](https://web.archive.org/web/20081014022433/http://developer.mozilla.org/En/Same_origin_policy_for_JavaScript)) from the original on October 14, 2008. Retrieved November 12, 2007.
88. Developer documentation ([https://developer.mozilla.org/en/JavaScript\\_crypto](https://developer.mozilla.org/en/JavaScript_crypto)) Archived ([https://web.archive.org/web/20081204153404/https://developer.mozilla.org/en/JavaScript\\_crypto](https://web.archive.org/web/20081204153404/https://developer.mozilla.org/en/JavaScript_crypto)) December 4, 2008, at the *Wayback Machine* on using PKCS 11 modules (primarily smart cards) for cryptographic purposes
89. "Privacy & Security Preferences – SSL" ([https://www.mozilla.org/projects/security/pki/psm/help\\_21/ssl\\_help.html](https://www.mozilla.org/projects/security/pki/psm/help_21/ssl_help.html)). Mozilla. August 31, 2001. Archived ([https://web.archive.org/web/20070207074919/http://www.mozilla.org/projects/security/pki/psm/help\\_21/ssl\\_help.html](https://web.archive.org/web/20070207074919/http://www.mozilla.org/projects/security/pki/psm/help_21/ssl_help.html)) from the original on February 7, 2007. Retrieved January 24, 2007.
90. "Why You Should Use Firefox: 7 Reasons" (<https://www.ecloudbuzz.com/why-you-should-use-firefox-7-reasons/>) Archived (<https://web.archive.org/web/20170914172811/https://www.ecloudbuzz.com/why-you-should-use-firefox-7-reasons/>) September 14, 2017, at the *Wayback Machine*, eCloudBuzz, March 15, 2015.
91. "Mozilla Security Bug Bounty Program" (<https://www.mozilla.org/security/client-bug-bounty/>). Mozilla. Retrieved July 20, 2016.

92. "Handling Mozilla Security Bugs" (<https://www.mozilla.org/projects/security/security-bugs-policy.html>). Mozilla. February 11, 2003. Archived (<https://web.archive.org/web/20070218155814/http://www.mozilla.org/projects/security/security-bugs-policy.html>) from the original on February 18, 2007. Retrieved January 24, 2007.
93. Mossberg, Walter S. (September 16, 2004). "How to Protect Yourself From Vandals, Viruses If You Use Windows" (<https://web.archive.org/web/20070221061526/http://ptech.wsj.com/archive/ptech-20040916.html>). *The Wall Street Journal*. Archived from the original (<http://ptech.wsj.com/archive/ptech-20040916.html>) on February 21, 2007. Retrieved October 17, 2006. "I suggest dumping Microsoft's Internet Explorer Web browser, which has a history of security breaches. I recommend instead Mozilla Firefox, which is free at mozilla.org. It's not only more secure but also more modern and advanced, with tabbed browsing, which allows multiple pages to be open on one screen, and a better pop-up ad blocker than the belated one Microsoft recently added to IE."
94. Granneman, Scott (June 17, 2004). "Time to Dump Internet Explorer" (<https://www.securityfocus.com/columnists/249>). SecurityFocus. Archived (<https://web.archive.org/web/20061016205832/http://www.securityfocus.com/columnists/249>) from the original on October 16, 2006. Retrieved January 24, 2007.
95. Costa, Dan (March 24, 2005). Vamosi, Scott (ed.). "Mozilla Firefox Browser [sic] review" ([https://web.archive.org/web/20071226062127/http://reviews.cnet.com/browsers/mozilla-firefox/4505-3514\\_7-31117280.html](https://web.archive.org/web/20071226062127/http://reviews.cnet.com/browsers/mozilla-firefox/4505-3514_7-31117280.html)). CNET. Archived from the original ([https://reviews.cnet.com/browsers/mozilla-firefox/4505-3514\\_7-31117280.html](https://reviews.cnet.com/browsers/mozilla-firefox/4505-3514_7-31117280.html)) on December 26, 2007.
96. Boutin, Paul (June 30, 2004). "Are the Browser Wars Back?" (<http://www.slate.com/id/2103152>). *Slate*. Archived (<https://web.archive.org/web/20070124211350/http://www.slate.com/id/2103152/>) from the original on January 24, 2007. Retrieved January 24, 2007.
97. Krebs, Brian (January 4, 2007). "Internet Explorer Unsafe for 284 Days in 2006" ([http://blog.washingtonpost.com/securityfix/2007/01/internet\\_explorer\\_unsafe\\_for\\_2.html](http://blog.washingtonpost.com/securityfix/2007/01/internet_explorer_unsafe_for_2.html)). *The Washington Post*. Archived ([https://www.webcitation.org/5mqshLclo?url=http://blog.washingtonpost.com/securityfix/2007/01/internet\\_explorer\\_unsafe\\_for\\_2.html](https://www.webcitation.org/5mqshLclo?url=http://blog.washingtonpost.com/securityfix/2007/01/internet_explorer_unsafe_for_2.html)) from the original on January 17, 2010. Retrieved January 24, 2007.
98. Keizer, Gregg (September 25, 2006). "Firefox Sports More Bugs, But IE Takes 9 Times Longer To Patch" (<https://web.archive.org/web/20080207192416/http://www.techweb.com/wire/security/193005335>). TechWeb. Archived from the original (<http://www.techweb.com/wire/security/193005335>) on February 7, 2008. Retrieved January 24, 2007.
99. McMillan, Robert (March 7, 2006). "Symantec adjusts browser bug count" (<http://www.infoworld.com/d/security-central/symantec-adjusts-browser-bug-count-096>). InfoWorld. Archived (<https://web.archive.org/web/20090728151158/http://www.infoworld.com/d/security-central/symantec-adjusts-browser-bug-count-096>) from the original on July 28, 2009. Retrieved January 24, 2007.
100. "Web Browsers, Desktop Software Top "Dirty Dozen" Apps List" (<https://www.securityweek.com/dirty-dozen-list-top-desktop-applications-security-vulnerabilities>). Securityweek.com. November 17, 2010. Archived (<https://web.archive.org/web/20121126033030/http://www.securityweek.com/dirty-dozen-list-top-desktop-applications-security-vulnerabilities>) from the original on November 26, 2012. Retrieved January 2, 2013.
101. Francis, Bob (May 12, 2005). "Security firms fight Firefox fire with fire" (<http://www.infoworld.com/d/security-central/security-firms-fight-firefox-fire-fire-032>). *InfoWorld*. Archived (<https://web.archive.org/web/20090611140829/http://www.infoworld.com/d/security-central/security-firms-fight-firefox-fire-fire-032>) from the original on June 11, 2009. Retrieved June 24, 2009.
102. Kanellos, Michael (March 23, 2005). "Popularity won't make Firefox insecure, says Mozilla head" (<https://web.archive.org/web/20110521071123/http://www.silicon.com/technology/software/2005/03/23/popularity-wont-make-firefox-insecure-says-mozilla-head-39128935/>). silicon.com. Archived from the original (<http://software.silicon.com/applications/0,39024653,39128935,00.htm>) on May 21, 2011. Retrieved October 13, 2006.

103. Keizer, Gregg (October 16, 2009). "Sneaky Microsoft plug-in puts Firefox users at risk (Internet – Software – Security)" (<http://news.idg.no/cw/art.cfm?id=5CF0A4A7-1A64-67EA-E45F5A54F2136086>). *IDG News*. International Data Group. Archived (<https://web.archive.org/web/20091019084007/http://news.idg.no/cw/art.cfm?id=5CF0A4A7-1A64-67EA-E45F5A54F2136086>) from the original on October 19, 2009. Retrieved December 19, 2009.
104. "Microsoft Security Bulletin MS09-054 - Critical" (<https://web.archive.org/web/20100318054555/https://www.microsoft.com/technet/security/bulletin/ms09-054.msp>). Microsoft. October 13, 2009. Archived from the original (<http://www.microsoft.com/technet/security/bulletin/ms09-054.msp>) on March 18, 2010. Retrieved March 17, 2010.
105. "Vulnerability Report: Mozilla Firefox 3.6.x" (<http://secunia.com/product/28698/>). Secunia. Archived (<https://archive.is/20120718112014/http://secunia.com/product/28698/>) from the original on July 18, 2012. Retrieved February 11, 2011.
106. "Vulnerability Report: Microsoft Internet Explorer 8.x" (<http://secunia.com/advisories/product/21625/>). Secunia. Archived (<https://web.archive.org/web/20110220202947/http://secunia.com/advisories/product/21625/>) from the original on February 20, 2011. Retrieved February 11, 2011.
107. "Known Vulnerabilities in Mozilla Products" (<https://www.mozilla.org/security/known-vulnerabilities/>). *Mozilla*. Archived (<https://web.archive.org/web/20141119065654/https://www.mozilla.org/security/known-vulnerabilities/>) from the original on November 19, 2014. Retrieved September 12, 2017.
108. Anderson, Harvey (January 28, 2013). "Mozilla Recognized as Most Trusted Internet Company for Privacy" (<https://blog.mozilla.org/blog/2013/01/28/privacy-day-2013/>). *The Mozilla Blog*. Mozilla. Archived (<https://web.archive.org/web/20130322134828/https://blog.mozilla.org/blog/2013/01/28/privacy-day-2013/>) from the original on March 22, 2013. Retrieved March 23, 2013.
109. Murphy, David (February 24, 2013). "Firefox 22 to Disable Third-Party Cookies by Default" (<http://www.pcmag.com/article2/0,2817,2415810,00.asp>). *PC Magazine*. Archived (<https://web.archive.org/web/20130926022552/http://www.pcmag.com/article2/0,2817,2415810,00.asp>) from the original on September 26, 2013. Retrieved September 21, 2013.
110. Keizer, Gregg (June 20, 2013). "Mozilla again postpones Firefox third-party cookie-blocking, this time for months" ([http://www.computerworld.com/s/article/9240218/Mozilla\\_again\\_postpones\\_Firefox\\_third\\_party\\_cookie\\_blocking\\_this\\_time\\_for\\_months](http://www.computerworld.com/s/article/9240218/Mozilla_again_postpones_Firefox_third_party_cookie_blocking_this_time_for_months)). *Computerworld*. Archived ([https://web.archive.org/web/20130926102706/http://www.computerworld.com/s/article/9240218/Mozilla\\_again\\_postpones\\_Firefox\\_third\\_party\\_cookie\\_blocking\\_this\\_time\\_for\\_months](https://web.archive.org/web/20130926102706/http://www.computerworld.com/s/article/9240218/Mozilla_again_postpones_Firefox_third_party_cookie_blocking_this_time_for_months)) from the original on September 26, 2013. Retrieved September 21, 2013.
111. "Firefox 23 Release Notes" (<https://www.mozilla.org/en-US/firefox/23.0/releasesnotes/>). Mozilla.org. August 6, 2013. Archived (<https://web.archive.org/web/20140328214014/http://www.mozilla.org/en-US/firefox/23.0/releasesnotes/>) from the original on March 28, 2014. Retrieved March 14, 2014.
112. Bright, Peter (August 6, 2013). "Firefox 23 lands with a new logo and mixed content blocking" (<https://arstechnica.com/information-technology/2013/08/firefox-23-lands-with-a-new-logo-and-mixed-content-blocking/>). *Ars Technica*. Archived (<https://web.archive.org/web/20140218022903/http://arstechnica.com/information-technology/2013/08/firefox-23-lands-with-a-new-logo-and-mixed-content-blocking/>) from the original on February 18, 2014. Retrieved March 14, 2014.
113. Anthony, Sebastian (August 7, 2013). "Firefox 23 finally kills the blink tag, removes ability to turn off JavaScript, introduces new logo" (<http://www.extremetech.com/computing/163291-firefox-23-finally-kills-the-blink-tag-removes-ability-to-turn-off-javascript-introduces-new-logo>). *ExtremeTech*. Archived ([https://web.archive.org/web/20140329071544/http://www.extremetech.com/computing/163291-firefox-23-finally-kills-the-blink-tag-removes-ability-to-turn-off-javascript-introduces-new-log](https://web.archive.org/web/20140329071544/http://www.extremetech.com/computing/163291-firefox-23-finally-kills-the-blink-tag-removes-ability-to-turn-off-javascript-introduces-new-logo)) from the original on March 29, 2014. Retrieved March 14, 2014.

114. Huge Security Flaw Leaks VPN Users' Real IP-addresses (<https://torrentfreak.com/huge-security-flaw-leaks-vpn-users-real-ip-addresses-150130/>) Archived (<https://web.archive.org/web/20150222081035/http://torrentfreak.com/huge-security-flaw-leaks-vpn-users-real-ip-addresses-150130/>) February 22, 2015, at the [Wayback Machine](#) TorrentFreak.com (January 30, 2015). Retrieved February 21, 2015.
115. "Addons/Extension Signing" ([https://wiki.mozilla.org/Addons/Extension\\_Signing](https://wiki.mozilla.org/Addons/Extension_Signing)). *Mozilla wiki*. Archived ([https://web.archive.org/web/20191010005008/https://wiki.mozilla.org/Addons/Extension\\_Signing](https://web.archive.org/web/20191010005008/https://wiki.mozilla.org/Addons/Extension_Signing)) from the original on October 10, 2019. Retrieved November 23, 2019.
116. Villalobos, Jorge (February 10, 2015). "Introducing Extension Signing: A Safer Add-on Experience" (<https://blog.mozilla.org/addons/2015/02/10/extension-signing-safer-experience/>). *Mozilla Add-ons Blog*. Archived (<https://web.archive.org/web/20191029202549/https://blog.mozilla.org/addons/2015/02/10/extension-signing-safer-experience/>) from the original on October 29, 2019. Retrieved November 23, 2019.
117. Song, Victoria (May 6, 2019). "Firefox fixes borked extensions for everyone but legacy users" (<https://gizmodo.com/firefox-fixes-borked-extensions-for-everyone-but-legacy-1834548155>). Gizmodo. Archived (<https://web.archive.org/web/20190506165014/https://gizmodo.com/firefox-fixes-borked-extensions-for-everyone-but-legacy-1834548155>) from the original on May 6, 2019. Retrieved May 6, 2019.
118. "FAQ – Why is Telemetry enabled by default on the Firefox pre-release channels?" ([https://wiki.mozilla.org/Telemetry/FAQ#Why\\_is\\_Telemetry\\_enabled\\_by\\_default\\_on\\_the\\_Firefox\\_pre-release\\_channels.3F](https://wiki.mozilla.org/Telemetry/FAQ#Why_is_Telemetry_enabled_by_default_on_the_Firefox_pre-release_channels.3F)). *MozillaWiki*. Mozilla. Archived ([https://web.archive.org/web/20140810084936/https://wiki.mozilla.org/Telemetry/FAQ#Why\\_is\\_Telemetry\\_enabled\\_by\\_default\\_on\\_the\\_Firefox\\_pre-release\\_channels.3F](https://web.archive.org/web/20140810084936/https://wiki.mozilla.org/Telemetry/FAQ#Why_is_Telemetry_enabled_by_default_on_the_Firefox_pre-release_channels.3F)) from the original on August 10, 2014. Retrieved July 26, 2014.
119. "Mozilla Firefox Privacy Policy" (<https://www.mozilla.org/en-US/privacy/firefox/>). Mozilla Corporation, a subsidiary of the Mozilla Foundation. Archived (<https://web.archive.org/web/20180614123101/https://www.mozilla.org/en-US/privacy/firefox/>) from the original on June 14, 2018. Retrieved June 18, 2018.
120. Bright, Peter (December 21, 2016). "Firefox takes the next step toward rolling out multi-process to everyone" (<https://arstechnica.com/information-technology/2016/12/firefox-takes-the-next-step-towards-rolling-out-multi-process-to-everyone/>). *Ars Technica*. Archived (<https://web.archive.org/web/20161224234423/http://arstechnica.com/information-technology/2016/12/firefox-takes-the-next-step-towards-rolling-out-multi-process-to-everyone/>) from the original on December 24, 2016. Retrieved December 25, 2016.
121. "Security/Sandbox - MozillaWiki" ([https://wiki.mozilla.org/Security/Sandbox#Current\\_Status](https://wiki.mozilla.org/Security/Sandbox#Current_Status)). *wiki.mozilla.org*. Archived ([https://web.archive.org/web/20181113025949/https://wiki.mozilla.org/Security/Sandbox#Current\\_Status](https://web.archive.org/web/20181113025949/https://wiki.mozilla.org/Security/Sandbox#Current_Status)) from the original on November 13, 2018. Retrieved November 12, 2018.
122. "Private Auskunft - DNS mit Privacy und Security vor dem Durchbruch" (<https://heise.de/-4079547>). *c't Magazin* (in German). Retrieved July 25, 2018.
123. "Cloudflare Resolver for Firefox" (<https://developers.cloudflare.com/1.1.1.1/commitment-to-privacy/privacy-policy/firefox/>). *cloudflare.com*. Archived (<https://web.archive.org/web/20180722071110/https://developers.cloudflare.com/1.1.1.1/commitment-to-privacy/privacy-policy/firefox/>) from the original on July 22, 2018. Retrieved July 25, 2018.
124. Wood, Marissa. "Latest Firefox Release is Faster than Ever" (<https://blog.mozilla.org/blog/2019/05/21/latest-firefox-release-is-faster-than-ever/>). *The Mozilla Blog*. Archived (<https://web.archive.org/web/20190521231343/https://blog.mozilla.org/blog/2019/05/21/latest-firefox-release-is-faster-than-ever/>) from the original on May 21, 2019. Retrieved May 22, 2019.

125. "Firefox Update to Trusts OS-Installed Certificates to Prevent TLS Errors" (<https://hackhex.com/security/firefox-update-to-trusts-os-installed-certificates-to-prevent-tls-errors-5886.html>). *Hack Hex*. July 2, 2019. Archived (<https://web.archive.org/web/20190702124351/https://hackhex.com/security/firefox-update-to-trusts-os-installed-certificates-to-prevent-tls-errors-5886.html>) from the original on July 2, 2019. Retrieved July 2, 2019.
126. Cimpanu, Catalin (October 17, 2019). "Germany's cyber-security agency recommends Firefox as most secure browser" (<https://www.zdnet.com/article/germanys-cyber-security-agency-recommends-firefox-as-most-secure-browser/>). *ZDNet*. Archived (<https://web.archive.org/web/20191024172218/https://www.zdnet.com/article/germanys-cyber-security-agency-recommends-firefox-as-most-secure-browser/>) from the original on October 24, 2019. Retrieved October 24, 2019.
127. "Firefox Announces New Partner in Delivering Private and Secure DNS Services to Users" (<https://blog.mozilla.org/blog/2019/12/17/firefox-announces-new-partner-in-delivering-private-and-secure-dns-services-to-users/>).
128. "Security Vulnerabilities fixed in Firefox 72.0.1 and Firefox ESR 68.4.1" (<https://www.mozilla.org/en-US/security/advisories/mfsa2020-03/>). *Mozilla*. Retrieved January 10, 2020.
129. "Mozilla patches actively exploited Firefox zero-day" (<https://www.helpnetsecurity.com/2020/01/09/cve-2019-17026/>). *Help Net Security*. January 9, 2020. Retrieved January 10, 2020.
130. "Index of /pub/firefox/releases/1.0/win32/" (<https://archive.mozilla.org/pub/mozilla.org/firefox/releases/1.0/win32/>). Retrieved August 22, 2011.
131. "Firefox 73.0.1 System Requirements" (<https://www.mozilla.org/en-US/firefox/73.0.1/system-requirements/>). *mozilla.org*. Mozilla Foundation. February 18, 2020.
132. "Firefox ESR 68.5.0 System Requirements" (<https://www.mozilla.org/en-US/firefox/68.5.0/system-requirements/>). *mozilla.org*. Mozilla Foundation. February 11, 2020.
133. "Update on Firefox Support for Windows XP and Vista" (<https://blog.mozilla.org/futurereleases/2016/12/23/firefox-support-for-xp-and-vista/>). *Future Releases*. Mozilla Foundation. December 23, 2016 – via [blog.mozilla.org](https://blog.mozilla.org).
134. Keybl, Alex. "Upcoming Firefox Support Changes" (<https://blog.mozilla.org/futurereleases/2012/03/23/upcoming-firefox-support-changes/>). *Firefox Future Releases Blog*. Retrieved December 10, 2017.
135. "Firefox - 45.9.0 System Requirements" (<https://www.mozilla.org/en-US/firefox/45.9.0/system-requirements/>). *mozilla.org*. Mozilla Foundation. April 19, 2017.
136. Protalinski, Emil (April 29, 2016). "Mozilla will retire Firefox support for OS X 10.6, 10.7, and 10.8 in August 2016" (<https://venturebeat.com/2016/04/29/mozilla-will-retire-firefox-support-for-os-x-10-6-10-7-and-10-8-in-august-2016/>). *VentureBeat*.
137. "Mozilla Firefox 16 System Requirements" (<https://www.mozilla.org/en-US/firefox/16.0.2/system-requirements/>). *mozilla.org*. Mozilla Foundation. Retrieved November 20, 2012.
138. "Mozilla Firefox 4 System Requirements" (<http://www.mozilla.com/en-US/firefox/4.0/system-requirements/>). *mozilla.org*. Mozilla Foundation. Retrieved March 24, 2011.
139. "Mozilla Firefox 3.6 System Requirements" (<http://techappsmedia.org/mozilla-firefox-3-6-system-requirements-installing-desktop/>). *techappsmedia*. July 10, 2016.
140. Nightingale, Johnathan (March 14, 2014). "Update on Metro" (<https://blog.mozilla.org/futurereleases/2014/03/14/metro/>). *mozilla.org*. Mozilla Foundation.
141. "Mozilla Firefox System Requirements" (<https://www.mozilla.org/en-US/firefox/67.0/system-requirements/>). *mozilla.org*. Mozilla Foundation. May 21, 2019. Archived (<https://web.archive.org/web/20190522134733/https://www.mozilla.org/en-US/firefox/67.0/system-requirements/>) from the original on May 22, 2019. Retrieved May 21, 2019.
142. "Will Firefox work on my mobile device?" (<https://support.mozilla.org/en-US/kb/will-firefox-work-my-mobile-device>). *Mozilla Support*. Mozilla. Archived (<https://web.archive.org/web/20131202141442/https://support.mozilla.org/en-US/kb/will-firefox-work-my-mobile-device>) from the original on December 2, 2013. Retrieved December 3, 2013.

143. "Supported build configurations – MDN" ([https://developer.mozilla.org/en-US/docs/Supported\\_build\\_configurations](https://developer.mozilla.org/en-US/docs/Supported_build_configurations)). Archived ([https://web.archive.org/web/20150701205926/https://developer.mozilla.org/en-US/docs/Supported\\_build\\_configurations](https://web.archive.org/web/20150701205926/https://developer.mozilla.org/en-US/docs/Supported_build_configurations)) from the original on July 1, 2015. Retrieved August 12, 2015.
144. "Firefox — Aurora Notes (45.0a2)" (<https://www.mozilla.org/en-US/firefox/45.0a2/auroranotes/>). *Mozilla.org*. Mozilla Foundation. December 18, 2015. Archived (<https://web.archive.org/web/20160304081510/https://www.mozilla.org/en-US/firefox/45.0a2/auroranotes/>) from the original on March 4, 2016. Retrieved February 29, 2016.
145. "Firefox Web Browser on the App Store" (<https://itunes.apple.com/us/app/apple-store/id989804926>). *App Store*. Apple. Archived (<https://web.archive.org/web/20170830073541/https://itunes.apple.com/us/app/apple-store/id989804926>) from the original on August 30, 2017. Retrieved October 1, 2017.
146. Tilley, Chris (April 21, 2006). "Mozilla Firefox and Windows NT 3.51" (<http://www.c-amie.co.uk/technical/mozilla-firefox-and-windows-nt-3-51/>). *C:Amie*. Archived (<https://web.archive.org/web/20181226084426/http://www.c-amie.co.uk/technical/mozilla-firefox-and-windows-nt-3-51/>) from the original on December 26, 2018. Retrieved December 25, 2018.
147. Nightingale, Johnathan (March 14, 2014). "Update on Metro" (<https://blog.mozilla.org/futurereleases/2014/03/14/metro/>). *Firefox Future Releases Blog*. Archived (<https://web.archive.org/web/20170424075847/https://blog.mozilla.org/futurereleases/2014/03/14/metro/>) from the original on April 24, 2017. Retrieved March 14, 2014.
148. "Mozilla Firefox Web Browser – Supported Android Devices" (<https://support.mozilla.org/en-US/kb/will-firefox-work-my-mobile-device>). Mozilla. Archived (<https://web.archive.org/web/20130626194325/http://support.mozilla.org/en-US/kb/will-firefox-work-my-mobile-device>) from the original on June 26, 2013. Retrieved July 20, 2013.
149. Lutz, Zachary (September 21, 2013). "Firefox for Windows 8 enters Aurora channel with touch and gesture support" (<https://www.engadget.com/2013/09/21/firefox-for-windows-8-enters-aurora-channel/>). *Engadget*. Archived (<https://web.archive.org/web/20130924082341/http://www.engadget.com/2013/09/21/firefox-for-windows-8-enters-aurora-channel/>) from the original on September 24, 2013. Retrieved September 21, 2013.
150. Mayo, Mark (December 15, 2015). "Firefox 64-bit Web Browser for Windows Now Available" (<https://blog.mozilla.org/futurereleases/2015/12/15/firefox-64-bit-for-windows-available/>). *Future Releases*. Mozilla Foundation. Archived (<https://web.archive.org/web/20171214183058/https://blog.mozilla.org/futurereleases/2015/12/15/firefox-64-bit-for-windows-available/>) from the original on December 14, 2017. Retrieved December 14, 2017 – via [blog.mozilla.org](https://blog.mozilla.org).
151. "Update on Firefox Support for Windows XP and Vista" (<https://blog.mozilla.org/futurereleases/2016/12/23/firefox-support-for-xp-and-vista/>). *Future Releases*. Mozilla Foundation. December 23, 2016. Archived (<https://web.archive.org/web/20171214183333/https://blog.mozilla.org/futurereleases/2016/12/23/firefox-support-for-xp-and-vista/>) from the original on December 14, 2017. Retrieved December 14, 2017 – via [blog.mozilla.org](https://blog.mozilla.org).
152. "Mozilla Developer Preview Alpha 5 Release Notes" (<https://web.archive.org/web/20110629211729/http://www.mozilla.org/projects/firefox/3.7a5/releasenotes/>). Mozilla. June 14, 2010. Archived from the original (<https://www.mozilla.org/projects/firefox/3.7a5/releasenotes/>) on June 29, 2011. Retrieved July 10, 2011.
153. "Firefox 46.0 System Requirements" (<https://www.mozilla.org/en-US/firefox/46.0/system-requirements/>). *Mozilla*. Archived (<https://web.archive.org/web/20180109063904/https://www.mozilla.org/en-US/firefox/46.0/system-requirements/>) from the original on January 9, 2018. Retrieved February 26, 2018.
154. "Firefox for Nokia N900 Release Notes" (<https://www.mozilla.com/mobile/1.0/releasenotes/>). Mozilla. January 28, 2010. Retrieved January 30, 2010.

155. "Mozilla Launches Firefox 4 for Android, Allowing Users to Take the Power and Customization of Firefox Everywhere" (<http://blog.mozilla.com/blog/2011/03/29/mozilla-launches-firefox-4-for-android-allowing-users-to-take-the-power-and-customization-of-firefox-everywhere-2/>). *Mozilla Blog*. Mozilla. March 29, 2011. Archived (<https://web.archive.org/web/20110813151427/http://blog.mozilla.com/blog/2011/03/29/mozilla-launches-firefox-4-for-android-allowing-users-to-take-the-power-and-customization-of-firefox-everywhere-2/>) from the original on August 13, 2011. Retrieved March 29, 2011.
156. Finkle, Mark (September 30, 2010). "Fennec 4.0 – New and Notable" (<http://starkravingfinkle.org/blog/2010/09/fennec-4-0-new-and-notable/>). Stark Raving Finkle. Archived (<https://web.archive.org/web/20110427064902/http://starkravingfinkle.org/blog/2010/09/fennec-4-0-new-and-notable/>) from the original on April 27, 2011. Retrieved March 29, 2011.
157. "Bug 681422: No updates in Maemo5 (Comment #1)" ([https://bugzilla.mozilla.org/show\\_bug.cgi?id=681422#c1](https://bugzilla.mozilla.org/show_bug.cgi?id=681422#c1)). *Mozilla Bugzilla*. Mozilla. Archived ([https://web.archive.org/web/20120111034034/https://bugzilla.mozilla.org/show\\_bug.cgi?id=681422#c1](https://web.archive.org/web/20120111034034/https://bugzilla.mozilla.org/show_bug.cgi?id=681422#c1)) from the original on January 11, 2012. Retrieved August 29, 2011.
158. "Firefox mobile features" (<https://www.mozilla.com/mobile/features/>). Mozilla. Retrieved January 30, 2010.
159. Bilton, Ricardo (March 10, 2013). "Mozilla wants to bring Firefox to iOS, but mean ol' Apple's standing in its way" (<https://venturebeat.com/2013/03/10/mozilla-firefox-ios/>). *VentureBeat*. Archived (<https://web.archive.org/web/20161018233945/http://venturebeat.com/2013/03/10/mozilla-firefox-ios/>) from the original on October 18, 2016. Retrieved September 18, 2016.
160. Shankland, Stephen (June 4, 2014). "iOS 8 grants new power to rival browsers, Web-based apps" (<https://www.cnet.com/news/ios-8-grants-new-power-to-rival-browsers-web-based-apps/>). CNET. Archived (<https://web.archive.org/web/20160901151602/http://www.cnet.com/news/ios-8-grants-new-power-to-rival-browsers-web-based-apps/>) from the original on September 1, 2016. Retrieved September 18, 2016.
161. "Firefox for iOS Now Available for Preview" (<https://blog.mozilla.org/futurereleases/2015/09/03/firefox-for-ios-now-available-for-preview/>). September 3, 2015. Archived (<https://web.archive.org/web/20150904142955/https://blog.mozilla.org/futurereleases/2015/09/03/firefox-for-ios-now-available-for-preview/>) from the original on September 4, 2015. Retrieved September 7, 2015.
162. Clarke, Gavin (September 4, 2015). "Fruity Firefox: Mozilla caves to Apple, unveils iOS-friendly browser" ([https://www.theregister.co.uk/2015/09/04/mozilla\\_reveals\\_firefox\\_ios\\_preview\\_apple/](https://www.theregister.co.uk/2015/09/04/mozilla_reveals_firefox_ios_preview_apple/)). Archived ([https://web.archive.org/web/20150906221803/http://www.theregister.co.uk/2015/09/04/mozilla\\_reveals\\_firefox\\_ios\\_preview\\_apple/](https://web.archive.org/web/20150906221803/http://www.theregister.co.uk/2015/09/04/mozilla_reveals_firefox_ios_preview_apple/)) from the original on September 6, 2015. Retrieved September 7, 2015.
163. "Update on Firefox for iOS" (<https://blog.mozilla.org/futurereleases/2015/05/22/update-on-firefox-for-ios/>). May 22, 2015. Archived (<https://web.archive.org/web/20150905091030/https://blog.mozilla.org/futurereleases/2015/05/22/update-on-firefox-for-ios/>) from the original on September 5, 2015. Retrieved September 7, 2015.
164. Perez, Sarah (November 17, 2016). "Mozilla launches Firefox Focus, a private web browser for iPhone" (<https://techcrunch.com/2016/11/17/mozilla-launches-firefox-focus-a-private-web-browser-for-iphone/>). *TechCrunch*. Archived (<https://web.archive.org/web/20170510080834/https://techcrunch.com/2016/11/17/mozilla-launches-firefox-focus-a-private-web-browser-for-iphone/>) from the original on May 10, 2017. Retrieved May 6, 2017.
165. "Firefox 68.5.0 APK Download by Mozilla - APKMirror" (<https://www.apkmirror.com/apk/mozilla/firefox/firefox-68-5-0-release/>). *APKMirror*. Retrieved February 11, 2020.
166. "Mozilla: End of Firefox for Android slated for 2020 as Fenix rises" (<https://www.zdnet.com/article/mozilla-end-of-firefox-for-android-slated-for-2020-as-fenix-rises/>). *zdnet.com*. ZDNet. April 29, 2019.
167. "Mobile/Platforms/Android" ([https://wiki.mozilla.org/Mobile/Platforms/Android#System\\_Requirements](https://wiki.mozilla.org/Mobile/Platforms/Android#System_Requirements)). *wiki.mozilla.org*. Mozilla Foundation. September 28, 2017. System Requirements.



168. "Firefox for Android — Notes (55.0.2) — Mozilla" (<https://www.mozilla.org/en-US/firefox/android/55.0.2/releasenotes/>). *mozilla.org*. Mozilla Foundation. August 16, 2017.
169. "Firefox for Android — Notes (47.0) — Mozilla" (<https://www.mozilla.org/en-US/firefox/android/47.0/releasenotes/>). *mozilla.org*. Mozilla Foundation. June 7, 2016.
170. "Mozilla Firefox for Mobile 32 Release Notes" (<https://www.mozilla.org/en-US/mobile/32.0/release-notes/>). *mozilla.org*. Mozilla Foundation. September 2, 2014.
171. "FreeBSD port of Firefox" (<https://www.freshports.org/www/firefox/>). Archived (<https://web.archive.org/web/20141005134424/http://www.freshports.org/www/firefox/>) from the original on October 5, 2014. Retrieved September 30, 2014.
172. NetBSD binary package of Firefox 24 (<ftp://ftp.fr.netbsd.org/pub/pkgsrc/packages/NetBSD/amd64/6.1.2/All/firefox-24.0.tgz>)
173. "OpenBSD ports ∴ www/mozilla-firefox" (<http://ports.su/www/mozilla-firefox>). *ports.su*. Archived (<https://web.archive.org/web/20141223055452/http://ports.su/www/mozilla-firefox>) from the original on December 23, 2014. Retrieved December 23, 2014.
174. Source package of Firefox 3.6.15 (<http://pkgsrc-repo.uk.openindiana.org/packages/www/firefox-l10n-3.6.15.tgz>) Archived (<https://web.archive.org/web/20160304231602/http://pkgsrc-repo.uk.openindiana.org/packages/www/firefox-l10n-3.6.15.tgz>) March 4, 2016, at the [Wayback Machine](#). *pkgsrc-repo.uk.openindiana.org*.
175. "[hobbes.nmsu.edu] Viewing file: /pub/os2/apps/internet/www/browser/firefox-38.8.0.en-us.os2-wpi.wpi" (<http://hobbes.nmsu.edu/h-viewer.php?dir=/pub/os2/apps/internet/www/browser&file=firefox-38.8.0.en-us.os2-wpi.wpi>). *hobbes.nmsu.edu*. Archived (<https://web.archive.org/web/20170115064409/http://hobbes.nmsu.edu/h-viewer.php?dir=%2Fpub%2Fos2%2Fapps%2Finternet%2Fwww%2Fbrowser&file=firefox-38.8.0.en-us.os2-wpi.wpi>) from the original on January 15, 2017. Retrieved October 18, 2016.
176. "Bezilla: Mozilla for BeOS" (<https://www-archive.mozilla.org/ports/beos/>). *www-archive.mozilla.org*. Archived (<https://web.archive.org/web/20190820061412/https://www-archive.mozilla.org/ports/beos/>) from the original on August 20, 2019. Retrieved August 20, 2019.
177. "BeBytes - The BeOS Software Archive" (<http://www.be.wildman-productions.org/index.php?action=displaypage&pagename=appitem&appid=1>). *www.be.wildman-productions.org*. Archived (<https://web.archive.org/web/20190415061608/http://www.be.wildman-productions.org/index.php?action=displaypage&pagename=appitem&appid=1>) from the original on April 15, 2019. Retrieved August 20, 2019.
178. "Firefox entry on BeBits" (<https://web.archive.org/web/20120717032004/http://www.bebits.com/app/3143>). Archived from the original (<http://www.bebits.com/app/3143>) on July 17, 2012.
179. "Firefox Bleeding Edge entry on BeBits" (<https://web.archive.org/web/20120415005220/http://www.bebits.com/app/2715>). Archived from the original (<http://www.bebits.com/app/2715>) on April 15, 2012.
180. "The many ways of running firefox on OpenBSD" (<https://undeadly.org/cgi?action=article&sid=20170425173917>). OpenBSD Journal. April 25, 2017. Archived (<https://web.archive.org/web/20171228112231/https://undeadly.org/cgi?action=article&sid=20170425173917>) from the original on December 28, 2017. Retrieved December 18, 2017.
181. "Directory Listing: /pub/firefox/releases/52.0.2esr/contrib/" (<https://ftp.mozilla.org/pub/firefox/releases/52.0.2esr/contrib/>). *Ftp.mozilla.org*. Archived (<https://web.archive.org/web/20180215023333/https://ftp.mozilla.org/pub/firefox/releases/52.0.2esr/contrib/>) from the original on February 15, 2018. Retrieved February 14, 2018.
182. "Mozilla – Firefox, Thunderbird & Sunbird" (<http://unixpackages.com/packages/mozilla>). UNIX Packages. Archived (<https://web.archive.org/web/20151208111945/https://unixpackages.com/packages/mozilla>) from the original on December 8, 2015. Retrieved October 29, 2015.

183. Yuanyuan, Hu; Xiaojin, Ren (January 17, 2017). "Oracle said to axe 200 Beijing jobs" ([http://www.chinadaily.com.cn/business/2017-01/17/content\\_27973408.htm](http://www.chinadaily.com.cn/business/2017-01/17/content_27973408.htm)). China Daily Information Co. Archived ([https://web.archive.org/web/20180215023714/http://www.chinadaily.com.cn/business/2017-01/17/content\\_27973408.htm](https://web.archive.org/web/20180215023714/http://www.chinadaily.com.cn/business/2017-01/17/content_27973408.htm)) from the original on February 15, 2018. Retrieved February 14, 2018.
184. "IBM AIX: Web browsers for AIX" (<https://web.archive.org/web/20160105042100/http://www-03.ibm.com/systems/power/software/aix/browsers/>). 03.ibm.com. Archived from the original (<http://www-03.ibm.com/systems/power/software/aix/browsers/>) on January 5, 2016. Retrieved October 29, 2015.
185. "Mozilla on AIX FAQ" (<https://www-archive.mozilla.org/unix/aix.html>). Archive.mozilla.org. Archived (<https://web.archive.org/web/20150706074002/http://www-archive.mozilla.org/unix/aix.html>) from the original on July 6, 2015. Retrieved October 29, 2015.
186. "README Mozilla, v. 1.7.13 for SCO(R) UnixWare(R) 7.1.3 SCO(R) UnixWare(R) 7.1.4" ([ftp://ftp.sco.com/pub/unixware7/714/other/mozilla\\_1\\_7\\_13a/UW7.README.html](ftp://ftp.sco.com/pub/unixware7/714/other/mozilla_1_7_13a/UW7.README.html)). Ftp.sco.com. June 6, 2005. Retrieved October 29, 2015.
187. "Firefox 3.5.09.00 for HP-UX 11i Downloads" (<https://h20392.www2.hpe.com/portal/swdepot/displayProductInfo.do?productNumber=HPUXFIREFOX>). Hewlett-Packard. Retrieved May 19, 2018.
188. "Firefox – Aurora Notes (35.0a2) – Mozilla" (<https://www.mozilla.org/en-US/firefox/35.0a2/auroranotes/>). November 10, 2014. Archived (<https://web.archive.org/web/20141118020735/https://www.mozilla.org/en-US/firefox/35.0a2/auroranotes/>) from the original on November 18, 2014. Retrieved November 21, 2014. "Version 35.0a2, first offered to Firefox Developer Edition users in November 2014"
189. "Bug 1072181 – Investigate tweaking aurora for developers" ([https://bugzilla.mozilla.org/show\\_bug.cgi?id=1072181](https://bugzilla.mozilla.org/show_bug.cgi?id=1072181)). Archived ([https://web.archive.org/web/20150701231218/https://bugzilla.mozilla.org/show\\_bug.cgi?id=1072181](https://web.archive.org/web/20150701231218/https://bugzilla.mozilla.org/show_bug.cgi?id=1072181)) from the original on July 1, 2015. Retrieved November 21, 2014.
190. "Firefox Channels" (<https://www.mozilla.org/en-US/firefox/channel/>). Mozilla. Archived (<https://web.archive.org/web/20160708090753/https://www.mozilla.org/en-US/firefox/channel/>) from the original on July 8, 2016. Retrieved July 1, 2016.
191. Spivak, Ali; Camp, Dave; Ledru, Sylvestre (April 17, 2017). "Simplifying Firefox Release Channels and Improving Developer Edition's Stability" (<https://hacks.mozilla.org/2017/04/simplifying-firefox-release-channels/>). Mozilla. Archived (<https://web.archive.org/web/20170517185024/https://hacks.mozilla.org/2017/04/simplifying-firefox-release-channels/>) from the original on May 17, 2017. Retrieved June 1, 2017.
192. "Firefox Extended Release Support for Your Organization, Business, Enterprise – Overview" (<https://www.mozilla.org/en-US/firefox/organizations/>). Mozilla.org. Archived (<https://web.archive.org/web/20120307001306/http://www.mozilla.org/en-US/firefox/organizations/>) from the original on March 7, 2012. Retrieved March 17, 2012.
193. Paul, Ryan (January 10, 2012). "Firefox extended support will mitigate rapid release challenges" (<https://arstechnica.com/business/news/2012/01/firefox-extended-support-will-mitigate-rapid-release-challenges.ars>). Arstechnica.com. Archived (<https://web.archive.org/web/20120412001748/http://arstechnica.com/business/news/2012/01/firefox-extended-support-will-mitigate-rapid-release-challenges.ars>) from the original on April 12, 2012. Retrieved April 4, 2012.
194. "Mozilla Relicensing FAQ" (<https://web.archive.org/web/20100513062601/http://www-archive.mozilla.org/MPL/relicensing-faq.html>). Mozilla. Archived from the original (<https://www-archive.mozilla.org/MPL/relicensing-faq.html>) on May 13, 2010. Retrieved January 24, 2007.
195. Stallman, Richard. "On the Netscape Public License" (<https://www.gnu.org/philosophy/netscape-npl.html>). Free Software Foundation. Archived (<https://web.archive.org/web/20070203202915/http://www.gnu.org/philosophy/netscape-npl.html>) from the original on February 3, 2007. Retrieved January 24, 2007.

196. "Various Licenses and Comments about Them. Mozilla Public License (MPL)" (<https://www.gnu.org/licenses/license-list.html#MPL>). Free Software Foundation. Archived (<https://web.archive.org/web/20100724023833/https://www.gnu.org/licenses/license-list.html#MPL>) from the original on July 24, 2010. Retrieved January 24, 2007.
197. "Announcing Version 2.0 of the Mozilla Public License" (<https://web.archive.org/web/20120306113159/http://mpl.mozilla.org/2012/01/03/announcing-mpl-2-0/>). Mozilla. January 3, 2012. Archived from the original (<https://mpl.mozilla.org/2012/01/03/announcing-mpl-2-0/>) on March 6, 2012. Retrieved June 6, 2012.
198. "Firefox 13 released – now using SPDY by default" (<http://www.h-online.com/open/news/item/Firefox-13-released-now-using-SPDY-by-default-1605039.html>). The H – Open. June 5, 2012. Archived (<https://web.archive.org/web/20120607032245/http://www.h-online.com/open/news/item/Firefox-13-released-now-using-SPDY-by-default-1605039.html>) from the original on June 7, 2012. Retrieved June 6, 2012.
199. "Mozilla Trademark Policy" (<https://www.mozilla.org/foundation/trademarks/policy.html>). Mozilla. Archived (<https://web.archive.org/web/20070128203012/http://www.mozilla.org/foundation/trademarks/policy.html>) from the original on January 28, 2007. Retrieved January 30, 2007.
200. "MXR is retired" (<https://mxr.mozilla.org/mozilla-central/source/browser/branding/official/LICENSE>). *mxr.mozilla.org*. Archived (<https://web.archive.org/web/20181105160726/https://mxr.mozilla.org/mozilla-central/source/browser/branding/official/LICENSE>) from the original on November 5, 2018. Retrieved June 18, 2018.
201. "541761 - Some text implies the Firefox logo is under a non-free copyright license" ([https://bugzilla.mozilla.org/show\\_bug.cgi?id=541761](https://bugzilla.mozilla.org/show_bug.cgi?id=541761)). *bugzilla.mozilla.org*. Archived ([https://web.archive.org/web/20130420225505/https://bugzilla.mozilla.org/show\\_bug.cgi?id=541761](https://web.archive.org/web/20130420225505/https://bugzilla.mozilla.org/show_bug.cgi?id=541761)) from the original on April 20, 2013. Retrieved January 10, 2012.
202. "Legal Stuff" (<https://web.archive.org/web/20130730224539/http://blog.mozilla.org/press/media-library/>). Mozilla Corp. Archived from the original (<https://www.mozilla.com/about/logo/legal.html>) on July 30, 2013. Retrieved March 7, 2009.
203. "Stop Logo Cruelty" (<https://web.archive.org/web/20100522010026/http://www.mozilla.com/en-US/about/logo/stop.html>). Mozilla Corp. Archived from the original (<https://www.mozilla.com/about/logo/stop.html>) on May 22, 2010. Retrieved March 7, 2009. *"Don't Create new elements that look enough like the Firefox logo so as to cause confusion."*
204. Krishnamurthy, Sandeep (August 1, 2009). "CASE: Mozilla vs. Godzilla — The Launch of the Mozilla Firefox Browser". *Journal of Interactive Marketing*. **23** (3): 259–271. doi:10.1016/j.intmar.2009.04.008 (<https://doi.org/10.1016/j.intmar.2009.04.008>).
205. Warne, Dan (May 7, 2007). "The stoush over Linux distributions using the Firefox trademark" ([http://apcmag.com/the\\_stoush\\_over\\_linux\\_distributions\\_using\\_the\\_firefox\\_trademark.htm](http://apcmag.com/the_stoush_over_linux_distributions_using_the_firefox_trademark.htm)). *APC Magazine*. ACP Magazines Ltd. Archived ([https://web.archive.org/web/20110817064956/http://apcmag.com/the\\_stoush\\_over\\_linux\\_distributions\\_using\\_the\\_firefox\\_trademark.htm](https://web.archive.org/web/20110817064956/http://apcmag.com/the_stoush_over_linux_distributions_using_the_firefox_trademark.htm)) from the original on August 17, 2011. Retrieved January 18, 2008.
206. "Debian Bug report logs – #354622: Uses Mozilla Firefox trademark without permission" (<https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=354622>). Debian. Archived (<https://web.archive.org/web/20130206164312/http://bugs.debian.org/cgi-bin/bugreport.cgi?bug=354622>) from the original on February 6, 2013. Retrieved January 30, 2007.
207. "Re: ice weasel" (<https://lists.gnu.org/archive/html/bug-gnuzilla/2007-09/msg00004.html>). September 23, 2007. Archived (<https://web.archive.org/web/20180706183225/http://lists.gnu.org/archive/html/bug-gnuzilla/2007-09/msg00004.html>) from the original on July 6, 2018. Retrieved July 6, 2018.
208. Mozilla Trademark Policy for Distribution Partners (<https://www.mozilla.org/foundation/trademarks/distribution-policy.html>) Archived (<https://web.archive.org/web/20130402194222/https://www.mozilla.org/foundation/trademarks/distribution-policy.html>) April 2, 2013, at the *Wayback Machine* Version 0.9 (DRAFT). Retrieved November 2, 2006.

209. Garrity, Steven (October 23, 2003). "Branding Mozilla: Towards Mozilla 2.0" (<http://www.actsofvolition.com/files/mozillabranding/>). Archived (<https://web.archive.org/web/20090115202336/http://www.actsofvolition.com/files/mozillabranding/>) from the original on January 15, 2009. Retrieved February 8, 2009.
210. Garrity, Steven (February 9, 2004). "Branding Mozilla: Towards Firefox 1.0" (<http://www.actsofvolition.com/archive/2004/february/brandingmozilla>). Archived (<https://web.archive.org/web/20090205043028/http://www.actsofvolition.com/archive/2004/february/brandingmozilla>) from the original on February 5, 2009. Retrieved February 8, 2009.
211. Hicks, Jon (February 9, 2004). "Branding Firefox" (<https://www.hicksdesign.co.uk/journal/branding-firefox>). Hicksdesign. Archived (<https://web.archive.org/web/20090208065605/http://hicksdesign.co.uk/journal/branding-firefox>) from the original on February 8, 2009. Retrieved February 8, 2009.
212. Hicks, Jon (December 17, 2004). "Spot the Difference" (<https://www.hicksdesign.co.uk/journal/spot-the-difference/>). Hicksdesign. Archived (<https://web.archive.org/web/20090205061152/http://www.hicksdesign.co.uk/journal/spot-the-difference/>) from the original on February 5, 2009. Retrieved February 8, 2009.
213. Hollister, Sean (June 11, 2019). "Firefox's new logo has more fire, less fox" (<https://www.theverge.com/2019/6/11/18661931/mozilla-firefox-logo-new-design-more-fire-less-fox>). *The Verge*. Archived (<https://web.archive.org/web/20190611234305/https://www.theverge.com/2019/6/11/18661931/mozilla-firefox-logo-new-design-more-fire-less-fox>) from the original on June 11, 2019. Retrieved June 12, 2019.
214. "Firefox 70 arrives with social tracking blocked by default, privacy report, and performance gains on macOS" (<https://venturebeat.com/2019/10/22/mozilla-firefox-70/>). *VentureBeat*. October 22, 2019. Archived (<https://web.archive.org/web/20191023001922/https://venturebeat.com/2019/10/22/mozilla-firefox-70/>) from the original on October 23, 2019. Retrieved October 23, 2019.
215. Martell, Sean (June 27, 2013). "(Re)building a simplified Firefox logo" (<http://blog.seanmartell.com/2013/06/27/rebuilding-a-simplified-firefox-logo/>). *Reticulating Splines*. Archived (<https://web.archive.org/web/20130702182008/http://blog.seanmartell.com/2013/06/27/rebuilding-a-simplified-firefox-logo/>) from the original on July 2, 2013. Retrieved September 5, 2013.
216. Mozilla Trademark Policy FAQ (<https://www.mozilla.org/foundation/trademarks/faq.html>) Archived (<https://web.archive.org/web/20130407213521/http://www.mozilla.org/foundation/trademarks/faq.html>) April 7, 2013, at the Wayback Machine: "What are the Mozilla Trademarks and Logos?". Retrieved November 2, 2006
217. Palmer, Judi; Colvig, Mary (October 19, 2005). "Firefox surpasses 100 million downloads" (<https://www-archive.mozilla.org/press/mozilla-2005-10-19.html>). Mozilla. Archived (<https://web.archive.org/web/20090621002130/http://www-archive.mozilla.org/press/mozilla-2005-10-19.html>) from the original on June 21, 2009. Retrieved February 4, 2007.
218. Ross, Blake (July 7, 2004). "Week 1: Press reviews" (<https://web.archive.org/web/20040805210701/http://www.blakeross.com/archives/000228.html>). Blake Ross. Archived from the original (<http://www.blakeross.com/archives/000228.html>) on August 5, 2004. Retrieved February 4, 2007.
219. "We're igniting the web. Join us!" (<https://web.archive.org/web/20070125002055/http://www.spreadfirefox.com/node/115>). *Spread Firefox: Sfx Team's Blog*. September 12, 2004. Archived from the original (<http://www.spreadfirefox.com/node/115>) on January 25, 2007. Retrieved February 4, 2007.
220. "Mozilla Foundation Places Two-Page Advocacy Ad in the New York Times" (<https://blog.mozilla.org/press/files/2013/11/nytimes-firefox-final.pdf>) (PDF). Mozilla Foundation. December 15, 2004. Archived (<https://web.archive.org/web/20180628015444/https://blog.mozilla.org/press/files/2013/11/nytimes-firefox-final.pdf>) (PDF) from the original on June 28, 2018. Retrieved June 15, 2010.
221. Colvig, Mary (July 2, 2008). "Set a Guinness World Record Enjoy a Better Web" (<https://web.archive.org/web/20110112114317/http://blog.mozilla.com/blog/2008/07/02/were-official/>). *Mozilla Blog*. Mozilla Foundation. Archived from the original (<http://www.spreadfirefox.com/worldrecord/>) on January 12, 2011. Retrieved May 30, 2008.

222. Keizer, Gregg (March 27, 2011). "Firefox 4 sets unofficial download record" ([http://www.computerworld.com/s/article/9215243/Firefox\\_4\\_sets\\_unofficial\\_download\\_record](http://www.computerworld.com/s/article/9215243/Firefox_4_sets_unofficial_download_record)). *Computerworld*. Archived ([https://web.archive.org/web/20121011112844/http://www.computerworld.com/s/article/9215243/Firefox\\_4\\_sets\\_unofficial\\_download\\_record](https://web.archive.org/web/20121011112844/http://www.computerworld.com/s/article/9215243/Firefox_4_sets_unofficial_download_record)) from the original on October 11, 2012. Retrieved August 21, 2012.
223. Snyder, Ryan (February 25, 2011). "Spread Firefox" (<https://web.archive.org/web/20120601030624/http://blog.mozilla.org/website-archive/2011/02/25/spread-firefox/>). Mozilla Blog. Archived from the original (<https://blog.mozilla.org/website-archive/2011/02/25/spread-firefox/>) on June 1, 2012. Retrieved May 15, 2012.
224. Sfx Team (July 16, 2006). "World Firefox Day Launches" (<https://web.archive.org/web/20061210145456/http://www.spreadfirefox.com/node/24241>). Spread Firefox: Sfx Team's Blog. Archived from the original (<http://www.spreadfirefox.com/node/24241>) on December 10, 2006. Retrieved January 24, 2007.
225. "Mozilla Foundation Announcement" (<https://www-archive.mozilla.org/press/mozilla-foundation.html>). Mozilla. July 15, 2003. Archived (<https://web.archive.org/web/20180315101954/https://www-archive.mozilla.org/press/mozilla-foundation.html>) from the original on March 15, 2018. Retrieved June 18, 2018.
226. "Friends of Firefox Frequently Asked Questions" (<https://web.archive.org/web/20071116084027/http://worldfirefoxday.com/faq.php>). Archived from the original (<http://www.worldfirefoxday.com/faq.php>) on November 16, 2007. Retrieved November 27, 2007.
227. "Take Back the Field" (<http://firefoxcropcircle.com/circle/>). *Oregon State Linux Users Group*. August 14, 2006. Archived (<https://web.archive.org/web/20111006171912/http://firefoxcropcircle.com/circle/>) from the original on October 6, 2011. Retrieved August 28, 2011.
228. Colvig, Mary (February 21, 2008). "500 million Firefox downloads: complete; 500 million grains: in progress" (<http://blog.mozilla.com/blog/2008/02/21/500-million-firefox-downloads-complete-500-million-grains-in-progress/>). *Mozilla Blog*. Mozilla. Archived (<https://web.archive.org/web/20110813142828/http://blog.mozilla.com/blog/2008/02/21/500-million-firefox-downloads-complete-500-million-grains-in-progress/>) from the original on August 13, 2011. Retrieved June 24, 2009.
229. Tenser, David (December 28, 2007). "Firefox Support Blog " Blog Archive " Firefox Live Chat launching today" (<http://blog.mozilla.com/sumo/2007/12/28/firefox-live-chat-launching-today/>). The Mozilla Blog. Archived (<https://web.archive.org/web/20110827184112/http://blog.mozilla.com/sumo/2007/12/28/firefox-live-chat-launching-today/>) from the original on August 27, 2011. Retrieved August 6, 2009.
230. Brinkmann, Martin (January 2, 2008). "Firefox Live Chat Support" (<https://www.ghacks.net/2008/01/02/firefox-live-chat-support/>). *gHacks Technology News*. Archived (<https://web.archive.org/web/20140502143814/http://www.ghacks.net/2008/01/02/firefox-live-chat-support/>) from the original on May 2, 2014. Retrieved May 2, 2014.
231. "Mozilla Blog" (<https://blog.mozilla.org/blog/2017/11/14/fast-for-good-launching-the-new-firefox-into-the-world/>). The Mozilla Blog. November 14, 2017. Archived (<https://web.archive.org/web/20180723082154/https://blog.mozilla.org/blog/2017/11/14/fast-for-good-launching-the-new-firefox-into-the-world/>) from the original on July 23, 2018. Retrieved July 23, 2018.
232. Finnie, Scot (December 8, 2005). "Firefox 1.5: Not Ready For Prime Time?" (<https://web.archive.org/web/20090624202020/http://www.informationweek.com/news/showArticle.jhtml?articleID=174909795>). *InformationWeek*. Archived from the original (<http://www.informationweek.com/software/opensource/174909795>) on June 24, 2009. Retrieved January 24, 2007.
233. Goodger, Ben (February 14, 2006). "About the Firefox 'memory leak' " (<https://web.archive.org/web/20110717141231/http://weblogs.mozillazine.org/ben/archives/009749.html>). *MozillaZine weblogs*. Archived from the original (<http://weblogs.mozillazine.org/ben/archives/009749.html>) on July 17, 2011. Retrieved November 17, 2007.

234. MozillaZine Knowledge Base contributors (January 19, 2007). "Problematic Extensions" ([http://kb.mozillazine.org/?title=Problematic\\_extensions&oldid=30448](http://kb.mozillazine.org/?title=Problematic_extensions&oldid=30448)). MozillaZine Knowledge Base. Archived ([https://web.archive.org/web/20110501042724/http://kb.mozillazine.org/?title=Problematic\\_extensions&oldid=30448](https://web.archive.org/web/20110501042724/http://kb.mozillazine.org/?title=Problematic_extensions&oldid=30448)) from the original on May 1, 2011. Retrieved January 24, 2007.
235. MozillaZine Knowledge Base contributors (January 17, 2007). "Adobe Reader" ([http://kb.mozillazine.org/?title=Adobe\\_Reader&oldid=30451](http://kb.mozillazine.org/?title=Adobe_Reader&oldid=30451)). MozillaZine Knowledge Base. Archived ([https://web.archive.org/web/20110501042720/http://kb.mozillazine.org/?title=Adobe\\_Reader&oldid=30451](https://web.archive.org/web/20110501042720/http://kb.mozillazine.org/?title=Adobe_Reader&oldid=30451)) from the original on May 1, 2011. Retrieved January 24, 2007.
236. Muchmore, Michael W. (July 19, 2006). "Which New Browser Is Best: Firefox 2, Internet Explorer 7, or Opera 9?" (<https://www.pcmag.com/article2/0,2817,1991370,00.asp>). *PC Magazine*. Archived (<https://web.archive.org/web/20080317040651/http://www.pcmag.com/article2/0,2817,1991370,00.asp>) from the original on March 17, 2008. Retrieved January 24, 2007.
237. Muradin, Alex (November 30, 2005). "Mozilla Firefox 1.5 Final Review" (<http://www.softpedia.com/reviews/windows/Mozilla-Firefox-Review-13677.shtml>). Softpedia. Archived (<https://web.archive.org/web/20061027180757/http://www.softpedia.com/reviews/windows/Mozilla-Firefox-Review-13677.shtml>) from the original on October 27, 2006. Retrieved September 22, 2006.
238. Wilton-Jones, Mark. "Browser Speed Comparisons" (<http://www.howtcreate.co.uk/browserSpeed.html#winspeed>). How To Create. Archived (<https://www.webcitation.org/5w4BZD490?url=http://www.howtcreate.co.uk/browserSpeed.html#winspeed>) from the original on January 28, 2011. Retrieved January 24, 2007.
239. "Firefox Preloader" (<https://sourceforge.net/projects/ffpreloader/>). SourceForge. Archived (<https://web.archive.org/web/20070513224644/http://sourceforge.net/projects/ffpreloader>) from the original on May 13, 2007. Retrieved April 26, 2007.
240. Larkin, Erik (October 24, 2006). "Radically New IE 7 or Updated Mozilla Firefox 2 – Which Browser Is Better?" ([http://www.pcworld.com/article/127309-6/radically\\_new\\_ie\\_7\\_or\\_updated\\_mozilla\\_firefox\\_2which\\_browser\\_is\\_better.html](http://www.pcworld.com/article/127309-6/radically_new_ie_7_or_updated_mozilla_firefox_2which_browser_is_better.html)). *PC World*. Archived ([https://web.archive.org/web/20080913021731/http://www.pcworld.com/article/127309-6/radically\\_new\\_ie\\_7\\_or\\_updated\\_mozilla\\_firefox\\_2which\\_browser\\_is\\_better.html](https://web.archive.org/web/20080913021731/http://www.pcworld.com/article/127309-6/radically_new_ie_7_or_updated_mozilla_firefox_2which_browser_is_better.html)) from the original on September 13, 2008. Retrieved May 18, 2007.
241. Dargahi, Ross (October 19, 2006). "IE 7 vs IE 6" (<http://www.zimbrablog.com/blog/archives/2006/10/ie-7-vs-ie-6.html>). Zimbra. Archived (<https://web.archive.org/web/20080615025653/http://www.zimbrablog.com/blog/archives/2006/10/ie-7-vs-ie-6.html>) from the original on June 15, 2008. Retrieved January 24, 2007.
242. Paul, Ryan (March 17, 2008). "Firefox 3 goes on a diet, eats less memory than IE and Opera" (<https://arstechnica.com/open-source/news/2008/03/firefox-3-goes-on-a-diet-eats-less-memory-than-ie-and-opera.ars>). Ars Technica. Archived (<https://web.archive.org/web/20090131231615/http://arstechnica.com/open-source/news/2008/03/firefox-3-goes-on-a-diet-eats-less-memory-than-ie-and-opera.ars>) from the original on January 31, 2009. Retrieved June 1, 2008.
243. Ryan, Wagner (March 26, 2008). "Browser Performance Comparisons" (<http://cybernetnews.com/cybernotes-browser-performance-comparisons/>). CyberNet News. Archived (<https://web.archive.org/web/20090625154908/http://cybernetnews.com/cybernotes-browser-performance-comparisons/>) from the original on June 25, 2009. Retrieved June 1, 2008.
244. "Firefox 3.0 Beta 4 Vs Opera 9.50 Beta Vs Safari 3.1 Beta: Multiple Sites Opening Test" (<https://web.archive.org/web/20080616073517/http://www.thebrowserworld.com/2008/03/29/firefox-30-beta-4-vs-opera-950-beta-vs-safari-31-beta-multiple-sites-opening-test/>). The Browser World. March 29, 2008. Archived from the original (<http://www.thebrowserworld.com/2008/03/29/firefox-30-beta-4-vs-opera-950-beta-vs-safari-31-beta-multiple-sites-opening-test/>) on June 16, 2008. Retrieved June 1, 2008.

245. Fulton, III, Scott M. (July 1, 2009). "The final score: Firefox 3.5 performs at 251% the speed of 3.0" (<http://www.betanews.com/article/The-final-score-Firefox-35-performs-at-251-the-speed-of-30/1246470925>). BetaNews. Archived (<https://web.archive.org/web/20090704025550/http://www.betanews.com/article/The-final-score-Firefox-35-performs-at-251-the-speed-of-30/1246470925>) from the original on July 4, 2009. Retrieved May 4, 2010.
246. Purdy, Kevin (January 26, 2010). "Browser Speed Tests: Firefox 3.6, Chrome 4, Opera 10.5, and Extensions" (<https://lifelifehacker.com/5457242/browser-speed-tests-firefox-36-chrome-4-opera-105-and-extensions>). Lifehacker. Archived (<https://web.archive.org/web/20100504143754/http://lifelifehacker.com/5457242/browser-speed-tests-firefox-36-chrome-4-opera-105-and-extensions>) from the original on May 4, 2010. Retrieved May 4, 2010.
247. Overa, Adam (February 21, 2012). "Benchmark Analysis: Windows 7 and Ubuntu 11.10" (<https://www.tomshardware.com/reviews/chrome-17-firefox-10-ubuntu,3129-17.html>). Tom's Hardware. Retrieved April 8, 2012.
248. Overa, Adam (June 30, 2013). "Chrome 27, Firefox 22, IE10, And Opera Next, Benchmarked" (<https://www.tomshardware.com/reviews/chrome-27-firefox-21-opera-next,3534-12.html>). *Tom's Hardware*. Retrieved May 2, 2014.
249. Brinkmann, Martin (January 2, 2014). "Chrome 34, Firefox 29, Internet Explorer 11: Memory Use 2014" (<https://www.ghacks.net/2014/01/02/chrome-34-firefox-29-internet-explorer-11-memory-use-2014/>). *gHacks Technology News*. Archived (<https://web.archive.org/web/20140505225706/http://www.ghacks.net/2014/01/02/chrome-34-firefox-29-internet-explorer-11-memory-use-2014/>) from the original on May 5, 2014. Retrieved May 2, 2014.
250. Tanous, Jim (April 1, 2015). "Spartan Benchmarks: Spartan vs. IE, Chrome, Firefox, and Opera" (<https://www.tekrevue.com/spartan-benchmarks-ie-chrome-firefox-opera/>). *TekRevue*. Archived (<https://web.archive.org/web/20151226174659/http://www.tekrevue.com/spartan-benchmarks-ie-chrome-firefox-opera/>) from the original on December 26, 2015. Retrieved January 10, 2016.
251. Coppock, Mark (May 27, 2018). "Battle of the best browsers: Edge vs. Chrome vs. Firefox vs. Safari vs. Opera vs. IE" (<https://www.digitaltrends.com/computing/best-browser-internet-explorer-vs-chrome-vs-firefox-vs-safari-vs-edge/>). *Digital Trends*. Archived (<https://web.archive.org/web/20160103215548/http://www.digitaltrends.com/computing/best-browser-internet-explorer-vs-chrome-vs-firefox-vs-safari-vs-edge/>) from the original on January 3, 2016. Retrieved January 10, 2016.
252. Murray, Matt (November 18, 2017). "Firefox Quantum vs. Chrome: Which Is Faster?" (<https://www.digitaltrends.com/computing/best-browser-internet-explorer-vs-chrome-vs-firefox-vs-safari-vs-edge/>). *Digital Trends*. Archived (<https://web.archive.org/web/20180517061601/https://www.digitaltrends.com/computing/best-browser-internet-explorer-vs-chrome-vs-firefox-vs-safari-vs-edge/>) from the original on May 17, 2018. Retrieved April 23, 2018.
253. Lynn, Bryan; Robbins, Jill (November 15, 2017). "5 Reasons to Try Firefox 'Quantum' Browser" (<https://learningenglish.voanews.com/a/five-reasons-to-try-mozilla-firefox-quantum/4116662.html>). *Voice of America* (VOA). Archived (<https://web.archive.org/web/20181101095453/https://learningenglish.voanews.com/a/five-reasons-to-try-mozilla-firefox-quantum/4116662.html>) from the original on November 1, 2018. Retrieved October 31, 2018.
254. "The Best Browser 2019" (<https://www.techradar.com/best/browser/>). Archived (<https://web.archive.org/web/20190714204710/https://www.techradar.com/best/browser/>) from the original on July 14, 2019. Retrieved July 15, 2019.
255. Shankland, Stephen (July 31, 2009). "Firefox: 1 billion downloads only part of the story" (<https://www.cnet.com/news/firefox-1-billion-downloads-only-part-of-the-story/>). CNET News. Archived (<https://web.archive.org/web/20140609001042/http://www.cnet.com/news/firefox-1-billion-downloads-only-part-of-the-story/>) from the original on June 9, 2014. Retrieved December 19, 2009.
256. "Spread Firefox: Mozilla Firefox Download Counts" (<https://web.archive.org/web/20050717012950/http://feeds.spreadfirefox.com/downloads/firefox.xml>). Mozilla. Archived from the original (<http://feeds.spreadfirefox.com/downloads/firefox.xml>) on July 17, 2005. Retrieved February 14, 2007.

257. Shankland, Stephen (July 1, 2010). "IBM names Firefox its default browser" (<https://www.cnet.com/news/ibm-names-firefox-its-default-browser/#!>). CNET. Archived (<https://web.archive.org/web/20140418003917/http://www.cnet.com/news/ibm-names-firefox-its-default-browser/#!>) from the original on April 18, 2014. Retrieved November 21, 2013.
258. Eggheck, Amir (December 1, 2011). "Chrome Overtakes Firefox Globally for First Time" (<https://gs.statcounter.com/press/chrome-overtakes-firefox-globally-for-first-time>). StatCounter. Archived (<https://web.archive.org/web/20171214120933/http://gs.statcounter.com/press/chrome-overtakes-firefox-globally-for-first-time>) from the original on December 14, 2017. Retrieved December 17, 2017.
259. Siegler, MG (November 18, 2010). "Mozilla: \$104 Million In Revenues, 400 Million Users, Google Deal Running Through 2011" (<https://techcrunch.com/2010/11/18/state-of-mozilla/>). Archived (<https://web.archive.org/web/20170629022722/https://techcrunch.com/2010/11/18/state-of-mozilla/>) from the original on June 29, 2018. Retrieved June 8, 2011.
260. "Desktop Browser Market Share Worldwide | Statcounter Global Stats" (<https://gs.statcounter.com/browser-market-share#monthly-201907-201907-bar>). StatCounter. August 1, 2019. Archived (<https://web.archive.org/web/20190913223459/https://gs.statcounter.com/browser-market-share#monthly-201907-201907-bar>) from the original on September 13, 2019. Retrieved September 4, 2019.
261. "Desktop Browser Market Share Worldwide" (<https://gs.statcounter.com/browser-market-share/desktop/worldwide/#monthly-201912-201912-bar>). *StatCounter Global Stats*. Archived (<https://web.archive.org/web/20171011022101/http://gs.statcounter.com/browser-market-share/desktop/worldwide/#monthly-201910-201910-bar>) from the original on October 11, 2017. Retrieved November 24, 2019.
262. "Firefox Public Data Report" (<https://data.firefox.com/>). *data.firefox.com*. Archived (<https://web.archive.org/web/20190504070939/https://data.firefox.com/>) from the original on May 4, 2019. Retrieved May 26, 2019.
263. "Desktop Browser Market Share Eritrea" (<https://gs.statcounter.com/browser-market-share/desktop/eritrea/#monthly-201805-201905>). *StatCounter Global Stats*. Archived (<https://web.archive.org/web/20190903211021/https://gs.statcounter.com/browser-market-share/desktop/eritrea/#monthly-201805-201905>) from the original on September 3, 2019. Retrieved September 6, 2019.
264. "Desktop Browser Market Share Cuba" (<https://gs.statcounter.com/browser-market-share/desktop/cuba/>). *StatCounter Global Stats*. Archived (<https://web.archive.org/web/20190903210936/https://gs.statcounter.com/browser-market-share/desktop/cuba/>) from the original on September 3, 2019. Retrieved September 6, 2019.

## Further reading

- Cheah, Chu Yeow (2005). *Firefox Secrets: A Need-to-Know Guide* (<https://archive.org/details/firefoxsecrets0000chea>). O'Reilly. ISBN 978-0-9752402-4-3.
- Feldt, Kenneth C. (2007). *Programming Firefox*. O'Reilly. ISBN 978-0-596-10243-2.
- Granneman, Scott (2005). *Don't Click on the Blue e!: Switching to Firefox*. O'Reilly. ISBN 978-0-596-00939-7.
- Hofmann, Chris; Marcia Knous; John Hedtke (2005). *Firefox and Thunderbird Garage*. Prentice Hall PTR. ISBN 978-0-13-187004-8.
- McFarlane, Nigel (2005). *Firefox Hacks* (<https://archive.org/details/firefoxhackstips00mcfa>). O'Reilly. ISBN 978-0-596-00928-1.
- Reyes, Mel (2005). *Hacking Firefox: More Than 150 Hacks, Mods, and Customizations* (<https://archive.org/details/hackingfirefoxmo0000reya>). Wiley. ISBN 978-0-7645-9650-6.
- Ross, Blake (2006). *Firefox for Dummies*. Wiley. ISBN 978-0-471-74899-1.



## External links

---

- [Official website \(https://www.firefox.com/\)](https://www.firefox.com/) 
  - [Firefox \(https://curlie.org/Computers/Software/Internet/Clients/Web/Browsers/Firefox/\)](https://curlie.org/Computers/Software/Internet/Clients/Web/Browsers/Firefox/) at [Curlie](#)
- 

Retrieved from "<https://en.wikipedia.org/w/index.php?title=Firefox&oldid=942995144>"

---

**This page was last edited on 28 February 2020, at 05:08 (UTC).**

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.