

your browser

other browsers

compare

news

device lab

about the test

browsers

features

Show all

Difference

Search...

x

BROWSERS

Select up to five browsers and compare their test results in detail

528

Chrome 68

497

Firefox 60

312

Internet
Explorer 11

518

Opera 45

parsing rules

<!DOCTYPE html> triggers standards mode

5

Yes ✓

5

Yes ✓

5

Yes ✓

5

Yes ✓

HTML5 tokenizer

Yes ✓

Yes ✓

Yes ✓

Yes ✓

HTML5 tree building

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Parsing inline SVG

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Parsing inline MathML

Yes ✓

Yes ✓

Yes ✓

Yes ✓

elements

27

Embedding custom non-visible data

Yes ✓

26

Yes ✓

15

Yes ✓

25

Yes ✓

New or modified elements

▶ Section elements	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ Grouping content elements	Yes ✓	Yes ✓	Partial ○	Yes ✓
▶ Text-level semantic elements	Yes ✓	Partial ○	Partial ○	Partial ○
▶ Interactive elements	Partial ○	Partial ○	No ✗	Partial ○

Global attributes or methods

hidden attribute	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ Dynamic markup insertion	Yes ✓	Yes ✓	Yes ✓	Yes ✓

forms

64

52

34

64

Field types

▶ input type=text	Yes ✓	Yes ✓	Partial ○	Yes ✓
▶ input type=search	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ input type=tel	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ input type=url	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ input type=email	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ input type=date	Yes ✓	Yes ✓	No ✗	Yes ✓
▶ input type=month	Yes ✓	No ✗	No ✗	Yes ✓
▶ input type=week	Yes ✓	No ✗	No ✗	Yes ✓
▶ input type=time	Yes ✓	Yes ✓	No ✗	Yes ✓
▶ input type=datetime-local	Yes ✓	No ✗	No ✗	Yes ✓
▶ input type=number	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ input type=range	Yes ✓	Yes ✓	Yes ✓	Yes ✓

▶ <code>input type=color</code>	Yes ✓	Yes ✓	No ✗	Yes ✓
▶ <code>input type=checkbox</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ <code>input type=image</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ <code>input type=file</code>	Partial ○	Partial ○	Partial ○	Partial ○
▶ <code>textarea</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ <code>select</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ <code>fieldset</code>	Yes ✓	Yes ✓	Partial ○	Yes ✓
▶ <code>datalist</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ <code>output</code>	Yes ✓	Yes ✓	No ✗	Yes ✓
▶ <code>progress</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ <code>meter</code>	Yes ✓	Yes ✓	No ✗	Yes ✓

Fields

▶ Field validation	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ Association of controls and forms	Yes ✓	Yes ✓	Partial ○	Yes ✓
▶ Other attributes	Yes ✓	Partial ○	Partial ○	Yes ✓
▶ CSS selectors	Yes ✓	Yes ✓	Partial ○	Yes ✓
▶ Events	Yes ✓	Yes ✓	Partial ○	Yes ✓

Forms

▶ Form validation	Yes ✓	Yes ✓	Yes ✓	Yes ✓
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web components

Custom elements

10

2

0

10

Yes ✓

No ✗

No ✗

Yes ✓

Shadow DOM	Yes ✓	No ✗	No ✗	Yes ✓
HTML templates	Yes ✓	Yes ✓	No ✗	Yes ✓
HTML imports	Yes ✓	No ✗	No ✗	Yes ✓

location and orientation

	20	20	20	20
Geolocation	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Device Orientation	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Device Motion	Yes ✓	Yes ✓	Yes ✓	Yes ✓

output

	8	8	3	8
Full screen support	Prefixed ✓	Prefixed ✓	Prefixed ✓	Prefixed ✓
Web Notifications	Yes ✓	Yes ✓	No ✗	Yes ✓

input

	10	10	5	10
Gamepad control	Yes ✓	Yes ✓	No ✗	Yes ✓
Pointer Events	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Pointer Lock support	Yes ✓	Yes ✓	No ✗	Yes ✓

video

	29	29	31	29
video element	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Subtitles	Yes ✓	Yes ✓	Yes ✓	Yes ✓

Audio track selection	No ✗	No ✗	Yes ✓	No ✗
Video track selection	No ✗	No ✗	No ✗	No ✗
Poster images	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Codec detection	Yes ✓	Yes ✓	Yes ✓	Yes ✓

Video codecs

MPEG-4 ASP support	No ✗	No ✗	No ✗	No ✗
H.264 support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
H.265 support	No ✗	No ✗	No ✗	No ✗
Ogg Theora support	Yes ✓	Yes ✓	No ✗	Yes ✓
WebM with VP8 support	Yes ✓	Yes ✓	No ✗	Yes ✓
WebM with VP9 support	Yes ✓	Yes ✓	No ✗	Yes ✓

audio

29

27

20

29

audio element	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Loop audio	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Preload in the background	Yes ✓	Yes ✓	Yes ✓	Yes ✓

Advanced

Web Audio API	Yes ✓	Yes ✓	No ✗	Yes ✓
Speech Recognition	Prefixed ✓	No ✗	No ✗	Prefixed ✓
Speech Synthesis	Yes ✓	Yes ✓	No ✗	Yes ✓

Audio codecs

PCM audio support	Yes ✓	Yes ✓	No ✗	Yes ✓
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MP3 support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
AAC support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Dolby Digital support	No ✗	No ✗	No ✗	No ✗
Dolby Digital Plus support	No ✗	No ✗	No ✗	No ✗
Ogg Vorbis support	Yes ✓	Yes ✓	No ✗	Yes ✓
Ogg Opus support	Yes ✓	Yes ✓	No ✗	Yes ✓
WebM with Vorbis support	Yes ✓	Yes ✓	No ✗	Yes ✓
WebM with Opus support	Yes ✓	Yes ✓	No ✗	Yes ✓

streaming

	5	5	5	5
Media Source extensions	Yes ✓	Yes ✓	Yes ✓	Yes ✓
DRM support	Yes ✓	Yes ✓	Prefixed ✓	No ✗

Adaptive bit rate

Dynamic Adaptive Streaming / MPEG-DASH	No ✗	No ✗	No ✗	No ✗
HTTP Live Streaming / HLS	No ✗	No ✗	No ✗	No ✗

Codecs

▶ Video codecs	Partial ○	Partial ○	Partial ○	Partial ○
▶ Audio codecs	Partial ○	Partial ○	Partial ○	Partial ○

responsive images

	15	15	0	15
picture element	Yes ✓	Yes ✓	No ✗	Yes ✓
srcset attribute	Yes ✓	Yes ✓	No ✗	Yes ✓

srcset attribute	Yes ✓	Yes ✓	No ✗	Yes ✓
sizes attribute	Yes ✓	Yes ✓	No ✗	Yes ✓

2d graphics

24

24

14

24

Canvas 2D graphics	Yes ✓	Yes ✓	Yes ✓	Yes ✓
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Drawing primitives

Text support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Path support	Yes ✓	Yes ✓	No ✗	Yes ✓
Ellipse support	Yes ✓	Yes ✓	No ✗	Yes ✓
Dashed line support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
System focus ring support	Yes ✓	Yes ✓	No ✗	Yes ✓

Features

Hit testing support	No ✗	No ✗	No ✗	No ✗
Blending modes	Yes ✓	Yes ✓	No ✗	Yes ✓

Image export formats

PNG support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
JPEG support	Yes ✓	Yes ✓	Yes ✓	Yes ✓
JPEG-XR support	No ✗	No ✗	No ✗	No ✗
WebP support	Yes ✓	No ✗	No ✗	Yes ✓

3d and vr

20

23

15

20

3D Graphics

3D Graphics

WebGL	Yes ✓	Yes ✓	Prefixed ✓	Yes ✓
WebGL 2	Yes ✓	Yes ✓	No ✗	Yes ✓

VR Headset

WebVR	No ✗	Yes ✓	No ✗	No ✗
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animation

	8	8	5	8
Web Animations API	Yes ✓	Yes ✓	No ✗	Yes ✓
<code>window.requestAnimationFrame</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓

communication

	40	40	27	40
Server-Sent Events	Yes ✓	Yes ✓	No ✗	Yes ✓
Beacon	Yes ✓	Yes ✓	No ✗	Yes ✓
Fetch	Yes ✓	Yes ✓	No ✗	Yes ✓

XMLHttpRequest Level 2

Upload files	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ Response type support	Yes ✓	Yes ✓	Yes ✓	Yes ✓

WebSocket

Basic socket communication	Yes ✓	Yes ✓	Yes ✓	Yes ✓
<code>ArrayBuffer</code> and <code>Blob</code> support	Yes ✓	Yes ✓	Yes ✓	Yes ✓

streams

1 0 0 1

Streams	T	U	U	T
Readable streams	Yes ✓	No ✗	No ✗	Yes ✓
Writable streams	No ✗	No ✗	No ✗	No ✗

peer to peer	40	40	0	40
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Connectivity

WebRTC 1.0	Yes ✓	Yes ✓	No ✗	Yes ✓
ObjectRTC API for WebRTC	No ✗	No ✗	No ✗	No ✗
Data channel	Yes ✓	Yes ✓	No ✗	Yes ✓

Input

Access the webcam	Yes ✓	Yes ✓	No ✗	Yes ✓
Screen Capture	No ✗	No ✗	No ✗	No ✗
Enumerate devices	Yes ✓	Yes ✓	No ✗	Yes ✓

Recording

Media Stream recorder	Yes ✓	Yes ✓	No ✗	Yes ✓
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user interaction	19	18	12	19
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Drag and drop

► Attributes	Partial ○	Partial ○	Partial ○	Partial ○
► Events	Yes ✓	Yes ✓	Yes ✓	Yes ✓

HTML editing

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▶ Editing elements	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ Editing documents	Yes ✓	Yes ✓	Yes ✓	Yes ✓
▶ CSS selectors	Yes ✓	Yes ✓	No ✗	Yes ✓
▶ APIs	Yes ✓	Yes ✓	Yes ✓	Yes ✓

Clipboard

Clipboard API and events	Yes ✓	Yes ✓	No ✗	Yes ✓
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Spellcheck

<code>spellcheck</code> attribute	Yes ✓	Yes ✓	Yes ✓	Yes ✓
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performance

12

12

10

12

Workers

Web Workers	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Shared Workers	Yes ✓	Yes ✓	No ✗	Yes ✓

Other

<code>window.requestIdleCallback</code>	Yes ✓	Yes ✓	No ✗	Yes ✓
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security

29

27

13

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Web Cryptography API	Yes ✓	Yes ✓	Prefixed ✓	Yes ✓
Content Security Policy 1	Yes ✓	Yes ✓	No ✗	Yes ✓
Content Security Policy 2	Yes ✓	No ✗	No ✗	Yes ✓
Cross-Origin Resource Sharing	Yes ✓	Yes ✓	Yes ✓	Yes ✓

Subresource Integrity	Yes ✓	Yes ✓	No ✗	Yes ✓
Cross-document messaging	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Authentication				
Web Authentication / FIDO 2	No ✗	No ✗	No ✗	No ✗
Credential Management	Yes ✓	Yes ✓	No ✗	Yes ✓
Iframes				
Sandboxed <code>iframe</code>	Yes ✓	Yes ✓	Yes ✓	Yes ✓
<code>iframe</code> with inline contents	Yes ✓	Yes ✓	No ✗	Yes ✓
payments	5	0	0	0
Web Payments	Yes ✓	No ✗	No ✗	No ✗
web applications	16	17	3	16
Offline resources				
Application Cache	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Service Workers	Yes ✓	Yes ✓	No ✗	Yes ✓
Push Messages	Yes ✓	Yes ✓	No ✗	Yes ✓
Content and Scheme handlers				
Custom scheme handlers	Yes ✓	Yes ✓	No ✗	Yes ✓
Custom content handlers	No ✗	Yes ✓	No ✗	No ✗

storage

35

35

35

35

Key-value storage

Session Storage

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Local Storage

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Database storage

IndexedDB

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Objectstore `Blob` support

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Objectstore `ArrayBuffer` support

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Web SQL Database

Yes ✓

No ✗

No ✗

Yes ✓

files

15

15

15

15

Reading files

Basic support for reading files

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Create a `Blob` from a file

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Create a Data URL from a `Blob`

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Create an `ArrayBuffer` from a `Blob`

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Create a `Blob` URL from a `Blob`

Yes ✓

Yes ✓

Yes ✓

Yes ✓

Accessing the file system

FileSystem API

No ✗

No ✗

No ✗

No ✗

File API: Directories and System

Prefixed ✓

No ✗

No ✗

Prefixed ✓

scripting

3U

3U

1b

2/

Script execution

Asynchronous script execution	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Deferred script execution	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Script execution events	No ✗	Yes ✓	No ✗	No ✗
Runtime script error reporting	Yes ✓	Yes ✓	Yes ✓	Yes ✓

ECMAScript 5

JSON encoding and decoding	Yes ✓	Yes ✓	Yes ✓	Yes ✓
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ECMAScript 6

Modules	Yes ✓	Yes ✓	No ✗	No ✗
Classes	Yes ✓	Yes ✓	No ✗	Yes ✓
Arrow functions	Yes ✓	Yes ✓	No ✗	Yes ✓
Promises	Yes ✓	Yes ✓	No ✗	Yes ✓
Template strings	Yes ✓	Yes ✓	No ✗	Yes ✓
Typed arrays	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Internationalization	Yes ✓	Yes ✓	Yes ✓	Yes ✓

ECMAScript 7

Async and Await	Yes ✓	Yes ✓	No ✗	Yes ✓
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Other API's

Base64 encoding and decoding	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Mutation Observer	Yes ✓	Yes ✓	Yes ✓	Yes ✓
URL API	Yes ✓	Yes ✓	Yes ✓	Yes ✓

Encoding API	Yes ✓	Yes ✓	No ✗	Yes ✓
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other

	9	9	9	9
Session history	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Page Visibility	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Text selection	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Scroll into view	Yes ✓	Yes ✓	Yes ✓	Yes ✓

About these scores

The data above is compiled from automatically submitted test results. It is possible your results may differ slightly due to external

factors such as settings and which operating system is used. If you believe the data above is incorrect, or if you think we are missing an

important browser or device, please open a bug report at [Github](#).

Created by Niels Leenheer.

Please note that the HTML5 test is not affiliated with the W3C or the HTML5 working group.

HTML5 Logo by [W3C](#). Browser detection by [WhichBrowser](#).



CloudVPS
High Availability
Cloud Servers