

<iframe>: The Inline Frame element

The <iframe> [HTML](#) element represents a nested [browsing context](#), embedding another HTML page into the current one.

Try it



Each embedded browsing context has its own [session history](#) and [document](#). The browsing context that embeds the others is called the **parent browsing context**. The **topmost** browsing context — the one with no parent — is usually the browser window, represented by the [Window](#) object.

Warning: Because each browsing context is a complete document environment, every <iframe> in a page requires increased memory and other computing resources. While theoretically you can use as many <iframe> s as you like, check for performance problems.

Content categories	Flow content , phrasing content , embedded content, interactive content, palpable content.
Permitted content	None.
Tag omission	None, both the starting and ending tag are mandatory.
Permitted parents	Any element that accepts embedded content.
Implicit ARIA role	No corresponding role
Permitted ARIA roles	application , document , img , none , presentation
DOM interface	HTMLIFrameElement

Attributes

This element includes the [global attributes](#).

allow

Specifies a [feature policy](#) for the `<iframe>`. The policy defines what features are available to the `<iframe>` based on the origin of the request (e.g. access to the microphone, camera, battery, web-share API, etc.).

For more information and examples see: [Using Feature Policy](#) & [The `iframe` `allow` attribute](#)

allowfullscreen

Set to `true` if the `<iframe>` can activate fullscreen mode by calling the [`requestFullscreen\(\)`](#) method.

Note: This attribute is considered a legacy attribute and redefined as `allow="fullscreen"`.

allowpaymentrequest

Set to `true` if a cross-origin `<iframe>` should be allowed to invoke the [Payment Request API](#).

Note: This attribute is considered a legacy attribute and redefined as `allow="payment"`.

csp

A [Content Security Policy](#) enforced for the embedded resource. See [HTMLIFrameElement.csp](#) for details.

fetchpriority

Provides a hint of the relative priority to use when fetching the iframe document. Allowed values:

high

Signals a high-priority fetch relative to other iframe documents.

low

Signals a low-priority fetch relative to other iframe documents.

auto

Default: Signals automatic determination of fetch priority relative to other iframe documents.

height

The height of the frame in CSS pixels. Default is `150`.

loading

Indicates how the browser should load the iframe:

- `eager`: Load the iframe immediately, regardless if it is outside the visible viewport (this is the default value).
- `lazy`: Defer loading of the iframe until it reaches a calculated distance from the viewport, as defined by the browser.

name

A targetable name for the embedded browsing context. This can be used in the `target` attribute of the `<a>`, `<form>`, or `<base>` elements; the `formtarget` attribute of the `<input>` or `<button>` elements; or the `windowName` parameter in the [`window.open\(\)`](#) method.



referrerpolicy

Indicates which [referrer](#) to send when fetching the frame's resource:

- `no-referrer` : The [Referer](#) header will not be sent.
- `no-referrer-when-downgrade` : The [Referer](#) header will not be sent to [origins](#) without [TLS \(HTTPS\)](#).
- `origin` : The sent referrer will be limited to the origin of the referring page: its [scheme](#), [host](#), and [port](#).
- `origin-when-cross-origin` : The referrer sent to other origins will be limited to the scheme, the host, and the port. Navigations on the same origin will still include the path.
- `same-origin` : A referrer will be sent for [same origin](#), but cross-origin requests will contain no referrer information.
- `strict-origin` : Only send the origin of the document as the referrer when the protocol security level stays the same (HTTPS→HTTPS), but don't send it to a less secure destination (HTTPS→HTTP).
- `strict-origin-when-cross-origin` (default): Send a full URL when performing a same-origin request, only send the origin when the protocol security level stays the same (HTTPS→HTTPS), and send no header to a less secure destination (HTTPS→HTTP).
- `unsafe-url` : The referrer will include the origin *and* the path (but not the [fragment](#), [password](#), or [username](#)). **This value is unsafe**, because it leaks origins and paths from TLS-protected resources to insecure origins.

sandbox

Applies extra restrictions to the content in the frame. The value of the attribute can either be empty to apply all restrictions, or space-separated tokens to lift particular restrictions:

- `allow-downloads-without-user-activation` : Allows for downloads to occur without a gesture from the user.
- `allow-downloads` : Allows for downloads to occur with a gesture from the user.
- `allow-forms` : Allows the resource to submit forms. If this keyword is not used, form submission is blocked.
- `allow-modals` : Lets the resource [open modal windows](#) .
- `allow-orientation-lock` : Lets the resource [lock the screen orientation](#).
- `allow-pointer-lock` : Lets the resource use the [Pointer Lock API](#).
- `allow-popups` : Allows popups (such as `window.open()` , `target="_blank"` , or `showModalDialog()`). If this keyword is not used, the popup will silently fail to open.
- `allow-popups-to-escape-sandbox` : Lets the sandboxed document open new windows without those windows inheriting the sandboxing. For example, this can safely sandbox an advertisement without forcing the same restrictions upon the page the ad links to.
- `allow-presentation` : Lets the resource start a [presentation session](#).
- `allow-same-origin` : If this token is not used, the resource is treated as being from a special origin that always fails the [same-origin policy](#) (potentially preventing access to [data storage/cookies](#) and some JavaScript APIs).
- `allow-scripts` : Lets the resource run scripts (but not create popup windows).
- `allow-storage-access-by-user-activation` : Lets the resource request access to the parent's storage capabilities with the [Storage Access API](#).
- `allow-top-navigation` : Lets the resource navigate the top-level browsing context (the one named `_top`).
- `allow-top-navigation-by-user-activation` : Lets the resource navigate the top-level browsing context, but only if initiated by a user gesture.

Note:

- When the embedded document has the same origin as the embedding page, it is **strongly discouraged** to use both `allow-scripts` and `allow-same-origin` , as that lets the embedded document remove the `sandbox` attribute — making it no more secure than not using the `sandbox` attribute at all.

- Sandboxing is useless if the attacker can display content outside a sandboxed `iframe` — such as if the viewer opens the frame in a new tab. Such content should be also served from a *separate origin* to limit potential damage.
- The `sandbox` attribute is unsupported in Internet Explorer 9 and earlier.

`src`

The URL of the page to embed. Use a value of `about:blank` to embed an empty page that conforms to the [same-origin policy](#). Also note that programmatically removing an `<iframe>`'s `src` attribute (e.g. via [Element.removeAttribute\(\)](#)) causes `about:blank` to be loaded in the frame in Firefox (from version 65), Chromium-based browsers, and Safari/iOS.

`srcdoc`

Inline HTML to embed, overriding the `src` attribute. If a browser does not support the `srcdoc` attribute, it will fall back to the URL in the `src` attribute.

`width`

The width of the frame in CSS pixels. Default is `300`.

Deprecated attributes

These attributes are deprecated and may no longer be supported by all user agents. You should not use them in new content, and try to remove them from existing content.

`align`

The alignment of this element with respect to the surrounding context.

`frameborder`

The value `1` (the default) draws a border around this frame. The value `0` removes the border around this frame, but you should instead use the CSS property [border](#) to control `<iframe>` borders.

`longdesc`

A URL of a long description of the frame's content. Due to widespread misuse, this is not helpful for non-visual browsers.

`marginheight`

The amount of space in pixels between the frame's content and its top and bottom borders.

`marginwidth`

The amount of space in pixels between the frame's content and its left and right borders.

`scrolling`

Indicates when the browser should provide a scrollbar for the frame:

- `auto`: Only when the frame's content is larger than its dimensions.
- `yes`: Always show a scrollbar.
- `no`: Never show a scrollbar.

Scripting

Inline frames, like `<frame>` elements, are included in the [window.frames](#) pseudo-array.

With the DOM [HTMLIFrameElement](#) object, scripts can access the [window](#) object of the framed resource via the [contentWindow](#) property.

The [contentDocument](#) property refers to the `document` inside the `<iframe>`, same as `contentWindow.document`.

From the inside of a frame, a script can get a reference to its parent window with [window.parent](#).

Script access to a frame's content is subject to the [same-origin policy](#). Scripts cannot access most properties in other `window` objects if the script was loaded from a different origin, including scripts inside a frame accessing the frame's parent. Cross-origin communication can be achieved using [Window.postMessage\(\)](#).

Positioning and scaling

As a [replaced element](#), the position, alignment, and scaling of the embedded document within the `<iframe>` element's box, can be adjusted with the [object-position](#) and [object-fit](#) properties.

Examples

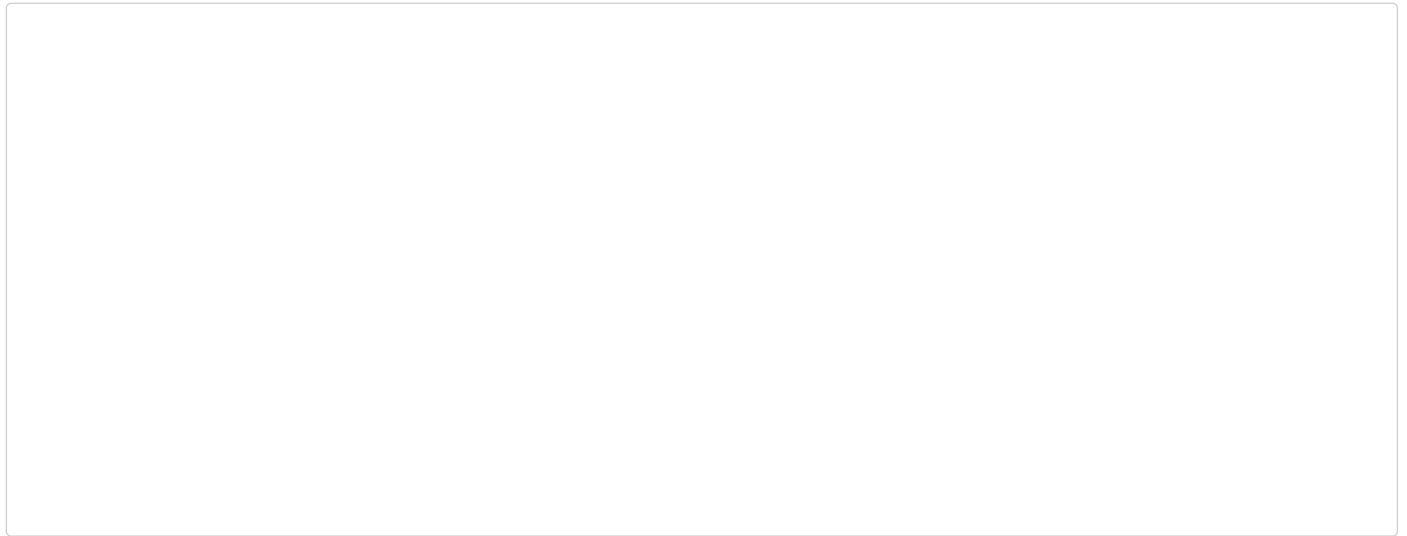
A simple <iframe>

This example embeds the page at <https://example.org> in an iframe.

HTML

```
<iframe src="https://example.org"
        title="iframe Example 1" width="400" height="300">
</iframe>
```

Result



Accessibility concerns

People navigating with assistive technology such as a screen reader can use the [title attribute](#) on an `<iframe>` to label its content. The title's value should concisely describe the embedded content:

```
<iframe title="Wikipedia page for Avocados" src="https://en.wikipedia.org/wiki/Avocado"></iframe>
```

Without this title, they have to navigate into the `<iframe>` to determine what its embedded content is. This context shift can be confusing and time-consuming, especially for pages with multiple `<iframe>` s and/or if embeds contain interactive content like video or audio.

Specifications

Specification
HTML Standard # the-iframe-element

Browser compatibility

[Report problems with this compatibility data on GitHub](#)

	Chrome	Edge	Firefox	Internet Explorer	Opera	Safari	WebView Android	Chrome Android	Firefox for Android	
iframe	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C An
align	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C An
allow	Chrome60	Edge79	Firefox74	Internet ExplorerNo	Opera47	Safari11.1	WebView Android60	Chrome Android60	Firefox for AndroidNo	(C An
allowfullscreen	Chrome27	Edge79	Firefox18	Internet Explorer11	Opera15	Safari7	WebView Android37	Chrome Android27	Firefox for Android18	(C An
allowpaymentrequest	ChromeNo	EdgeNo	Firefox56–83	Internet ExplorerNo	OperaNo	SafariNo	WebView AndroidNo	Chrome AndroidNo	Firefox for Android56–83	(C An
Aspect ratio computed from width and height attributes	Chrome79	Edge79	Firefox71	Internet ExplorerNo	Opera66	Safari14	WebView Android79	Chrome Android79	Firefox for Android79	(C An
External protocol URLs blocked	Chrome?	Edge?	Firefox67	Internet Explorer?	Opera?	Safari?	WebView Android?	Chrome Android?	Firefox for Android67	(C Ar
fetchpriority	Chrome101	Edge101	FirefoxNo	Internet ExplorerNo	OperaNo	SafariNo	WebView Android101	Chrome Android101	Firefox for AndroidNo	(C An
frameborder	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C An
height	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C An
loading	Chrome77	Edge79	FirefoxNo	Internet ExplorerNo	Opera64	SafariNo	WebView Android77	Chrome Android77	Firefox for AndroidNo	(C An
longdesc	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C An
marginheight	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C An

	Chrome	Edge	Firefox	Internet Explorer	Opera	Safari	WebView Android	Chrome Android	Firefox for Android	
marginwidth	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C Anc
name	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C Anc
referrerpolicy	Chrome51	Edge79	Firefox50	Internet ExplorerNo	Opera38	Safari13	WebView Android51	Chrome Android51	Firefox for Android50	(C An
sandbox	Chrome4	Edge12	Firefox17	Internet Explorer10	Opera15	Safari5	WebView AndroidYes	Chrome AndroidYes	Firefox for Android17	(C Ar
sandbox="allow-downloads"	Chrome83	Edge83	Firefox82	Internet ExplorerNo	Opera?	SafariNo	WebView Android83	Chrome Android83	Firefox for Android82	(C Ar
sandbox="allow-modals"	Chrome46	Edge79	Firefox49	Internet ExplorerNo	Opera33	Safari?	WebView Android46	Chrome Android46	Firefox for Android49	(C An
sandbox="allow-popups"	ChromeYes	Edge18	Firefox28	Internet Explorer?	OperaYes	Safari?	WebView AndroidYes	Chrome AndroidYes	Firefox for Android27	(C Ar
sandbox="allow-popups-to-escape-sandbox"	Chrome46	Edge79	Firefox49	Internet ExplorerNo	Opera32	Safari?	WebView Android46	Chrome Android46	Firefox for Android49	(C An
sandbox="allow-presentation"	Chrome53	Edge79	Firefox50	Internet ExplorerNo	Opera40	Safari?	WebView AndroidNo	Chrome Android53	Firefox for Android50	(C An
sandbox="allow-same-origin"	ChromeYes	EdgeYes	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C Anc
sandbox="allow-storage-access-by-user-activation"	ChromeNo	EdgeNo	Firefox65	Internet ExplorerNo	OperaNo	Safari11.1	WebView AndroidNo	Chrome AndroidNo	Firefox for Android65	(C An
sandbox="allow-top-navigation-by-user-activation"	Chrome58	Edge79	Firefox79	Internet ExplorerNo	Opera45	Safari11.1	WebView Android58	Chrome Android58	Firefox for Android79	(C An
scrolling	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C Anc
src	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C Anc
srcdoc	Chrome20	Edge79	Firefox25	Internet ExplorerNo	Opera15	Safari6	WebView Android37	Chrome Android25	Firefox for Android25	(C Ar
width	Chrome1	Edge12	FirefoxYes	Internet ExplorerYes	OperaYes	SafariYes	WebView AndroidYes	Chrome AndroidYes	Firefox for AndroidYes	(C Anc

Full support In development. Supported in a pre-release version. No support Compatibility unknown

Experimental. Expect behavior to change in the future. Non-standard. Check cross-browser support before using.

Deprecated. Not for use in new websites. See implementation notes. User must explicitly enable this feature.

Requires a vendor prefix or different name for use.

See also

- [Privacy, permissions, and information security](#)

Last modified: Mar 29, 2022, [by MDN contributors](#)