The **HTTP** **referer** (a misspelling of **referrer**[[1]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-1)) is an optional [HTTP header field](https://en.wikipedia.org/wiki/List_of_HTTP_header_fields) that identifies the address of the webpage (i.e., the [URI](https://en.wikipedia.org/wiki/Uniform_Resource_Identifier) or [IRI](https://en.wikipedia.org/wiki/Internationalized_Resource_Identifier)) which is linked to the resource being requested. By checking the referrer, the new webpage can see where the request originated.

In the most common situation this means that when a user clicks a [hyperlink](https://en.wikipedia.org/wiki/Hyperlink) in a [web browser](https://en.wikipedia.org/wiki/Web_browser), the browser sends a request to the server holding the destination webpage. The request may include the referer field, which indicates the last page the user was on (the one where they clicked the link).

Referer [logging](https://en.wikipedia.org/wiki/Server_log) is used to allow [websites](https://en.wikipedia.org/wiki/Website) and [web servers](https://en.wikipedia.org/wiki/Web_server) to identify where people are visiting them from, for promotional or statistical purposes.[[2]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-2)

The default behaviour of referer leaking puts websites at risk of privacy and security breaches.[[3]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-3)



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Etymology[[edit](https://en.wikipedia.org/w/index.php?title=HTTP_referer&action=edit&section=1)]

The misspelling of [*referrer*](https://en.wiktionary.org/wiki/referrer) originated in the original proposal by computer scientist [Phillip Hallam-Baker](https://en.wikipedia.org/wiki/Phillip_Hallam-Baker) to incorporate the field into the [HTTP](https://en.wikipedia.org/wiki/HTTP) specification.[[4]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-hallam-baker-4) The misspelling was set in stone by the time of its incorporation into the [Request for Comments](https://en.wikipedia.org/wiki/Request_for_Comments) standards document [RFC 1945](https://tools.ietf.org/html/rfc1945); document co-author [Roy Fielding](https://en.wikipedia.org/wiki/Roy_Fielding) has remarked that neither "referrer" nor the misspelling "referer" were recognized by the standard [Unix spell checker](https://en.wikipedia.org/wiki/Spell_(Unix)) of the period.[[5]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-fielding-5) "Referer" has since become a widely used spelling in the industry when discussing HTTP referrers; usage of the misspelling is not universal, though, as the correct spelling "referrer" is used in some web specifications such as the [Document Object Model](https://en.wikipedia.org/wiki/Document_Object_Model).

Details[[edit](https://en.wikipedia.org/w/index.php?title=HTTP_referer&action=edit&section=2)]

When visiting a [web page](https://en.wikipedia.org/wiki/Web_page), the referrer or referring page is the URL of the previous webpage from which a link was followed.

More generally, a referrer is the URL of a previous item which led to this request. The referrer for an image, for example, is generally the [HTML](https://en.wikipedia.org/wiki/HTML) page on which it is to be displayed. The referrer field is an optional part of the HTTP request sent by the [web browser](https://en.wikipedia.org/wiki/Web_browser) to the web server.[[6]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-6)

Many websites log referrers as part of their attempt to [track their users](https://en.wikipedia.org/wiki/Web_tracking). Most [web log analysis software](https://en.wikipedia.org/wiki/Web_log_analysis_software) can process this information. Because referrer information can violate [privacy](https://en.wikipedia.org/wiki/Privacy), some web browsers allow the user to disable the sending of referrer information.[[7]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-sendRefererHeader-7) Some [proxy](https://en.wikipedia.org/wiki/Proxy_server) and [firewall](https://en.wikipedia.org/wiki/Firewall_(networking)) software will also filter out referrer information, to avoid leaking the location of non-public websites. This can, in turn, cause problems: some web servers block parts of their website to web browsers that do not send the right referrer information, in an attempt to prevent [deep linking](https://en.wikipedia.org/wiki/Deep_linking) or unauthorised use of images ([bandwidth theft](https://en.wikipedia.org/wiki/Bandwidth_theft)). Some proxy software has the ability to give the top-level address of the target website as the referrer, which usually prevents these problems while still not divulging the user's last-visited website.

Many blogs publish referrer information in order to link back to people who are linking to them, and hence broaden the conversation. This has led, in turn, to the rise of [referrer spam](https://en.wikipedia.org/wiki/Referrer_spam): the sending of fake referrer information in order to popularize the spammer's website.

It is possible to access the referrer information on the client side using document.referrer in [JavaScript](https://en.wikipedia.org/wiki/JavaScript).[[8]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-document.referrer-8) This can be used, for example, to individualize a web page based on a user's search engine query. However, the referrer field does not always include queries, such as when using [Google Search](https://en.wikipedia.org/wiki/Google_Search) with https.[[9]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-9)

Referer hiding[[edit](https://en.wikipedia.org/w/index.php?title=HTTP_referer&action=edit&section=3)]

Most web servers maintain logs of all traffic, and record the HTTP referrer sent by the web browser for each request. This raises a number of privacy concerns, and as a result, a number of systems to prevent web servers being sent the real referring URL have been developed. These systems work either by blanking the referrer field or by replacing it with inaccurate data. Generally, [Internet-security](https://en.wikipedia.org/wiki/Internet_security) suites blank the referrer data, while web-based servers replace it with a false URL, usually their own. This raises the problem of referrer spam. The technical details of both methods are fairly consistent  – software applications act as a [proxy server](https://en.wikipedia.org/wiki/Proxy_server) and manipulate the HTTP request, while web-based methods load websites within frames, causing the web browser to send a referrer URL of their website address. Some web browsers give their users the option to turn off referrer fields in the request header.[[7]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-sendRefererHeader-7)

Most web browsers do not send the referrer field when they are instructed to redirect using the "Refresh" field. This does not include some versions of [Opera](https://en.wikipedia.org/wiki/Opera_(web_browser)) and many mobile web browsers. However, this method of redirection is discouraged by the [World Wide Web Consortium](https://en.wikipedia.org/wiki/World_Wide_Web_Consortium) (W3C).[[10]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-10)

If a website is accessed from a [HTTP Secure](https://en.wikipedia.org/wiki/HTTP_Secure) (HTTPS) connection and a link points to anywhere except another secure location, then the referrer field is not sent.[[11]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-11)

The [HTML5](https://en.wikipedia.org/wiki/HTML5) standard added support for the attribute/value rel="noreferrer", which instructs the user agent to not send a referrer.[[12]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-12)

Another referrer hiding method is to convert the original link URL to a [Data URI scheme](https://en.wikipedia.org/wiki/Data_URI_scheme)-based URL containing small HTML page with a [meta refresh](https://en.wikipedia.org/wiki/Meta_refresh) to the original URL. When the user is redirected from the data: page, the original referrer is hidden.

[Content Security Policy](https://en.wikipedia.org/wiki/Content_Security_Policy) standard version 1.1 introduced a new *referrer* directive that allows more control over the browser's behavior in regards to the referrer header. Specifically it allows the webmaster to instruct the browser not to block referrer at all, reveal it only when moving with the same origin etc.[[13]](https://en.wikipedia.org/wiki/HTTP_referer#cite_note-13)