

## **Difference between HTTP/1 and HTTP/2**

We need to use HTTP/2 in our websites, it improves the website performance. HTTP/1 was introduced in 1997 where webpages are mockups and had only a few images. But at present we have many images, scripts and stylesheets. HTTP/1 was not designed to handle such loads.

Web developers have come up with a bunch of different hacks to improve the load speed of pages. These hacks attempt to reduce the number of HTTP requests to the server, because establishing an HTTP connection carries a lot of overhead and doing that for hundreds of resources slows down the rendering of the page, which causes user frustration and leads to high bounce rates. Some of the popular hacks include domain sharding, image sprites, and concatenation and minification of JavaScript and CSS files.

HTTP/2 protocol was introduced in 2015, it solved many issues that HTTP/1 had with modern websites.

HTTP/2 improves website performance in multiple ways. It compresses the HTTP headers, allows for Server Push (which can send resources to the browser before the HTML document is completely downloaded and parsed) and enables Multiplexing, which allows the client and server to process multiple requests over the same connection. That reduces all of the overhead of establishing many HTTP connections.

Even though the HTTP/2 protocol was introduced more than 3 years ago, it is estimated that only 30% of websites utilize it as of October of 2018. HTTP/2 is an Upgrade protocol, so if the browser doesn't support the new protocol, it will still work fine with HTTP/1.1, but if the browser does support it, the connection will be upgraded to the HTTP/2 protocol. Given that "fallback" support, there are many reasons to set up HTTP/2 on your server, and no reason not to.