HTTP 1.1

What is HTTP 1.1 ?

HTTP 1.1 is the latest version of Hypertext Transfer Protocol (HTTP), the World Wide Web application protocol that runs on top of the Internet's TCP/IP suite of protocols. HTTP 1.1 provides faster delivery of Web pages than the original HTTP and reduces Web traffic. Developed by a committee of the Internet Engineering Task Force (IETF) that includes the Web's chief creator Tim Berners-Lee, HTTP 1.1 is supported by the latest Web servers and browsers.

Here's a summary of how HTTP 1.1 makes information flow faster:

1.Instead of opening and closing a connection for each application request, HTTP 1.1 provides a persistent connection that allows multiple requests to be batched or pipelined to an output buffer . The underlying Transmission Control Protocol layer can put multiple requests (and responses to requests) into one TCP segment that gets forwarded to the Internet Protocol layer for packet transmission. Because the number of connection and disconnection requests for a sequence of "get a file" requests is reduced, fewer packets need to flow across the Internet. Since requests are pipelined, TCP segments are more efficient. The overall result is less Internet traffic and faster performance for the user. Persistent connection is similar to Netscape's HTTP 1.0 extension called KeepAlive, but provides better handling of requests that go through proxy servers.

2.When a browser supporting HTTP 1.1 indicates it can decompress HTML files, a server will compress them for transport across the Internet, providing a substantial aggregate savings in the amount of data that has to be transmitted. (Image files are already in a compressed format so this improvement applies only to HTML and other non-image data types.)

3.In addition to persistent connections and other performance improvements, HTTP 1.1 also provides the ability to have multiple domain names share the same Internet address (IP address). This simplifies processing for Web servers that host a number of Web sites in what is sometimes called virtual hosting.

HTTP 2

What is HTTP 2 ?

HTTP/2 will make our applications faster, simpler, and more robust — a rare combination — by allowing us to undo many of the HTTP/1.1 workarounds previously done within our applications and address these concerns within the transport layer itself. Even better, it also opens up a number of entirely new opportunities to optimize our applications and improve performance!

Here's a summary of how HTTP2 makes information flow faster than HTTP 1.1:

1.Target a 50% reduction in page load time (PLT).

2.Avoid the need for any changes to content by website authors.

3.Minimize deployment complexity, and avoid changes in network infrastructure.

4.Develop this new protocol in partnership with the open-source community.

5.Gather real performance data to (in)validate the experimental protocol.

HTTP/1.x vs HTTP/2: A Comparative Study

HTTP2 Vs. HTTP1 is not a debate at all. HTTP2 is much faster and more reliable than HTTP1. HTTP1 loads a single request for every TCP connection, while HTTP2 avoids network delay by using multiplexing.

HTTP is a network delay sensitive protocol in the sense that if there is less network delay, then the page loads faster.

Difference between HTTP1.1 vs HTTP2

