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| (01).HTTP/1.1: Traditionally, HTTP/1.1 relies on a single connection for each request, which can lead to a phenomenon known as head-of-line blocking. This means that if a resource is slow to load, it can block the loading of other resources on the same page. | (01).HTTP/2: In contrast, HTTP/2 introduces multiplexing, allowing multiple streams of data to be sent and received concurrently over a single connection. This significantly improves the efficiency of resource loading, reducing latency and improving overall page load times. |
| (02). HTTP/1.1: Headers in HTTP/1.1 are sent as plaintext, leading to increased overhead, especially for repetitive or redundant information. This inefficiency can impact performance. | (02). HTTP/2: HTTP/2 addresses this issue by employing header compression. Headers are compressed before transmission, reducing the amount of data that needs to be sent over the network. This results in faster and more efficient communication between the client and the server. |
| (03). HTTP/1.1: This version of the protocol uses a text-based format, which is human-readable but can be less efficient for machines to process. | (03). HTTP/2: HTTP/2 switches to a binary protocol, which is more compact and faster to parse. This change contributes to a more streamlined communication process and enhances performance. |
| (04). HTTP/1.1: In the traditional model, the client sends a request to the server, and the server responds with the requested resources. There is no mechanism for the server to initiate resource delivery. | (04). HTTP/2: HTTP/2 introduces server push, allowing the server to proactively send resources to the client without waiting for a specific request. This feature can be leveraged to optimize page loading by anticipating and delivering resources before they are explicitly requested. |
| (05). HTTP/1.1: Each HTTP/1.1 request requires a new connection to the server, incurring the overhead of establishing and maintaining multiple connections | (05). HTTP/2: With the use of a single, multiplexed connection, HTTP/2 eliminates the need to repeatedly establish connections, resulting in more efficient resource utilization and reduced latency. |

Question 1:Write a Blog on Difference Between HTTP1.1 vs HTTP2?

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| **HTTP1.1** | **HTTP2** |

Conclusion:

In summary, the transition from HTTP/1.1 to HTTP/2 represents a significant leap forward in optimizing the performance and efficiency of web communication. The introduction of features like multiplexing, header compression, a binary protocol, and server push addresses many of the limitations of the earlier version. As web technologies continue to evolve, understanding these differences becomes crucial for developers and network administrators striving to provide a faster and more responsive user experience on the internet

Thank You,

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