HTTP (Hypertext Transfer Protocol) is the foundation of the internet and is used to transfer data between a client and a server. The current version of HTTP in widespread use is HTTP/1.1, which has been in use since 1999. However, in 2015, a new version of the protocol was released, known as HTTP/2. In this blog, we will discuss the main differences between HTTP/1.1 and HTTP/2.

One of the main differences between HTTP/1.1 and HTTP/2 is the way in which data is transferred between the client and the server. In HTTP/1.1, data is transferred in a request-response model, where the client sends a request and the server sends a response. This can be slow, especially when the client requests multiple resources from the same server, as each request is sent and processed separately.

HTTP/2, on the other hand, uses a multiplexing system, which allows multiple requests to be sent and processed at the same time. This means that a single connection can be used to send multiple requests and receive multiple responses, making the data transfer process much faster.

Another significant difference between HTTP/1.1 and HTTP/2 is the use of headers. In HTTP/1.1, headers are sent with each request, which can add significant overhead to the data transfer process. HTTP/2, however, uses a single set of headers, which are sent at the beginning of the connection and then reused for subsequent requests. This reduces the amount of data that needs to be sent with each request, making the process more efficient.

Additionally, HTTP/2 also support Server Push, which allows the server to send resources to the client without the client requesting them. This can be useful for sending resources that the client is likely to need, such as CSS and JavaScript files, ahead of time, so they can be cached and used immediately when needed.

In summary, HTTP/2 is a newer and more efficient version of the HTTP protocol that is faster and more efficient than HTTP/1.1. With multiplexing and header compression, it can reduce the amount of data that needs to be sent between the client and the server, making the data transfer process faster. Additionally, the support for Server Push in HTTP/2 can also improve the performance of web pages.