**Difference between HTTP1.0 and HTTP 2.0**

**What id HTTP?**

The foundation of data communication between two machines on the internet is HTTP.

**HTTP**=>Hyper Text Transfer Protocol

**Version of HTTP :**

|  |  |  |
| --- | --- | --- |
| **Version** | **Year introduced** | **Current status** |
| HTTP/0.9 | 1991 | Obsolete |
| HTTP/1.0 | 1996 | Obsolete |
| HTTP/1.1 | 1997 | Standard |
| [HTTP/2](https://en.wikipedia.org/wiki/HTTP/2) | 2015 | Standard |
| [HTTP/3](https://en.wikipedia.org/wiki/HTTP/3) | 2022 | Standard |

**Communication between the server and client:**

Client send a request to the server through the browser then server acknowledged the request, and their server response back to the client, all this communication happens using HTTP protocol.

**Difference between HTTP1.0 and HTTP 2.0:**

The main difference between HTTP1.0 and HTTP2.0 is Request Multiplex. Whenever we enter some URL into our browser. For example lets enter the [www.google.com](http://www.google.com) in browser.

**(HTTP1.0)**

Server Acknowledge and Respond

Client request Index.html

First client sends the HTTP, so the client first establish the TCP connection with the sever, and in that TCP connection, it sends the HTTP request to the server. In this case the client says I want HTTP index.HTml and it creates the HTTP request and sends it to the server. Server acknowledged the request and responds back this index.html file to the client. So this one is basically a TCP connection. This is the first TCP connection.

Server Acknowledge and Respond

Client request Index.css

Then the client want the index of CSS. So there is another TCP connection gets created and HTTP request gets sent to the server. Similarly of other resources also. Every time clients want some resources it has to establish the TCP connection with the server and sends the TCP request. So more the resources the client want means more the request to the sever. It make so more in the traffic to the server.

**(HTTP2.0)**

Single TCP connection

Index.html, index.css, main.js

Client request Index.html

Index.css

Main.js

Server Acknowledge and Respond

In the same scenario that mentioned above let see what happens in HTTP2.0. Client and server will be established only one TCP connection. There will be single traceable connection. And client can request to the server multiple resources in single traceable connection it synchronous. So there will be parallel request and synchronous parallel request will be going out to the server with the single TCP connection. And there is no limit for TCP connection we can request infinity of TCP connection in a single parallel TCP connection. It is the main beauty in the HTTP2.0 it loads the data faster comparative to HTTP 1.0