HTTP
HYPERTEXT TRANSFER PROTOCOL

HTTP 1 VS HTTP 2

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HTTP Hypertext Transfer Protocol

Underlying protocol of the

“ World Wide Web ”

Period : 1989- 1991

Intiated by: Tim Berners-Lee

HTTP

It was designed for communication between clients they are web browsers such as chrome,edge,safari or any type of program or device and web servers are most often computers in cloud but it can also used for other purpose

HTTP is a Application layer Protocol used for transmitting Hypermedia documents such as HTML.

HTTP Request/Response

Communication between clients and servers are by request and response

1.A client sends an HTTP Request to the Web

2.A web server receives the Request

3.The server runs an application to Process the request

4.The server returns an HTTP Response to the browser

5.The client receives the Response

HTTP 1

HTTP 1 is first usable version of HTTP created in 1997 and it has gone through many stages of development and so its known as HTTP 1.1.This version is still used on web.

HTTP 2

In 2015 One HTTP created that is HTTP 2.HTTP 2 solves several problems which was not solved by HTTP 1.HTTP 2 is more faster and efficient than HTTP 1 its because HTTP 2 does priortization during loading process.

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HTTP 2 VS HTTP 1

Multiplexing

HTTP 2 does multiplexing,In HTTP 1 loads resources one after the other,so if one resources cannot be loaded,it blocks all the other resources on the queue.In HTTP 2 there is usage of single TCP to send multiple sets of data at once so that the unloaded resouces will not blocks any other resources.HTTP 2 involves in splitting of data into binary-code messages and numbering the messages so that the client knows which set of binary message they received.

Server Push

HTTP 2 involves in server push,Generally the server only serves content to client when they ask for it,i.e..,only after the clients request,But this will not work correctly in modern webpages so in HTTP 2 the server push the contents without the clients request.And also the server sends messages to client stating what contents where pushed.

Header Compression

To speed up web performance both HTTP 2 and HTTP 1 involves in compressing HTTP Messages to smaller since smaller files load more quickly then larger ones.HTTP 1 also involves in compression but HTTP 2 used more advanced method called HPACK that eliminates redunant information in HTTP Header packets.This eliminates a fewer bytes from every HTTP Packets and the left bytes adds up quickly and resulting in faster loading.

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HTTP 2 USES

HTTP 2 is used by major browsers like Microsoft edge,Firefox,Chrome,Safari and Chrome for android and web servers are Apache HTTP Server,NGINX and Tomcat.