

ABSTRACT

This days, some websites still use HTTP/1.1 as their web protocol. This protocol still have some issues regarding security. Then come along HTTPS, a secured version of HTTP protocol that uses Secure Socket Layer and often used on streaming website. Focusing on the encryption in the client's side, this protocol sacrifice the response time for the security. For this problem, some protocols were build such as SPDY, and HTTP/2 that offers speed and security for websites. However, all of these protocols haven't been compared and as a result, what protocol is the fastest is not yet known. In this Final Task, these protocols will be compared to determine which protocol that have the fastest respond time. In order to determine which protocol is the fastest, a video will be loaded on browser(client's side) using user-based, latency-based, and packet-loss based, cause it would affect each protocol's response time. Based on experiment and analysis of the study, HTTP/2 have the smallest respond time in a website with video content, website with text content and website with picture content.

Keyword: *respond time, HTTP/1.1, HTTPS, SPDY, HTTP/2*