14 oCT 2024

Difference between hTTP AND HTTPS

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So basically HTTPS is HTTP but with an addition of security features such as Encryption and Verification.

HTTP transmits data in plain text format, which is highly discourages especially in today’s day and age, as such data is prone to interception and eavesdropping. Anyone with access to the network can potentially read your data.

On the other hand, HTTPS, encrypts our data using public key cryptographic techniques maybe like RSA Cryptography technique, in which two there are two keys involved in the whole encryption and decryption process, one is called the PUBLIC KEY, which everyone on the network has the access to, and the other one is called the PRIVATE KEY, which are kept secret. Now even if someone on the same network gets access to our data packets, he won’t be able to comprehend its real contents as he’ll only get his hands on the cipher text which is useless without its decryption key.

Furthermore, HTTPS allows for the exchange of cryptographic keys through their sites’ digital certificates, also known as the Handshake process.

Moreover, HTTPS also helps in authenticity verification, for example when a user navigates to a website, the possession of the private keys that matches with the public key in a website’s SSL certificate proves that the server is actually the legitimate host of the website.