

SSL Secured Socket Layer

- Standard security protocol for establishing an encrypted link b/w a web server and a browser.
- Made in 1994
- Less Secure
- Less complex software

TLS Transport Layer Security

- TLS provides communication security b/w client/server applications over the Internet.
- Made in 1999.
- More Secure
- Very complex software

TLS Protocol: It is a higher version of SSL protocol. It was made to provide three essential services. That is, encryption, authentication and data integrity.

It is made up of two layers. 1) Handshaking Layer, 2) Record Layer.

Handshaking Layer: - It carries out authentication of server & client.
- It handles encryption algorithms and their keys.

Record Layer: - It sits at the bottom of the TLS layers.
- It divides the data into blocks (records)
- It is responsible for the transmission of the block of data.
- It applies client/server addresses to the block.