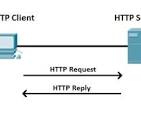
HTTP, HTTPS, FTP, TCP, and UDP are network protocols with distinct purposes. HTTP and HTTPS are used for web browsing, with HTTPS providing secure encryption. FTP facilitates file transfer. TCP ensures reliable data delivery, while UDP prioritizes speed over reliability.



HTTP (Hypertext Transfer Protocol): The foundation of the web, HTTP is used for transferring web pages and other resources between clients and servers. It operates on a client-server model and uses TCP for reliable connections.

HTTPS (Hypertext Transfer Protocol Secure): A secure version of HTTP, HTTPS encrypts data transmitted between a client and a server, protecting against eavesdropping and ensuring data integrity. It uses TLS/SSL for encryption.

FTP (File Transfer Protocol): Used for transferring files between computers, FTP operates on a client-server model and uses TCP for reliable connections. It is commonly used for uploading website files and other large files.

TCP (Transmission Control Protocol): A reliable, connection-oriented protocol, TCP provides sequenced and reliable data delivery between hosts. It ensures that data packets arrive in order and are not lost, making it suitable for applications requiring data integrity.

UDP (User Datagram Protocol): A connectionless, faster but less reliable protocol compared to TCP. UDP is suitable for applications where speed and real-time delivery are more important than guaranteed delivery, such as streaming and online gaming.