

TCP V S. UDP

	TCP or UDP	Reasons
Reliability and Connection Establishment	TCP	Reliable because it uses a <i>three-way handshake</i> to establish a connection before data transfer. Ensures delivery with acknowledgments, retransmissions, and flow control.
Data Integrity and Ordering	TCP	Guarantees ordered delivery of data packets and checks integrity with sequence numbers and error checking.

	TCP	UDP
Use cases	Suitable for applications that require accuracy and reliability, such as web browsing (HTTP/HTTPS), email (SMTP/IMAP/POP3), and file transfers (FTP).	Suitable for applications that require speed over reliability, such as VoIP calls, online gaming, and live video streaming.
Performance	Slower because of acknowledgments, retransmissions, and extra overhead.	Faster because it is lightweight, with no delivery confirmation or retransmissions.