

Topic 0: protocol, tcp, data, internet, messages

- The transmission control protocol (TCP) is defined as a connectionoriented communication protocol that allows computing devices and applications to send data via a network and verify its delivery forming one of the crucial pillars of the global internet
- Communication programs and computing devices utilize TCP for exchanging messages over a network
- The task of this protocol is to carry packets across the Internet and ensure the successful delivery of messages and data across networks
- The TCP protocol is connectionbased so it creates and maintains a connection between the receiver and the sender while the data is being passed between them
- Therefore any information that travels through the internet is guaranteed to arrive unalteredHowever while TCP is an instinctively reliable protocol these feedback mechanisms also result in a more significant overhead size
- As with TCP its purpose is to send and receive messages so its functioning is similar to the transmission control protocol
- It is commonly referred to as the fireandforget protocol because it is not concerned about whether or not the client receives the data

Topic 1: server, connection, established, client, data

- Before one can send any data the client and server must establish a connection
- The server must actively listen for client requests whenever a connection is established
- In this case connectionless refers to the fact that no connection is established before communication occurs
- Furthermore it does not ensure the delivery of the data packets from the server

Topic 2: udp, applications, protocol, datagram, realtime

- Most online applications use the user datagram protocol (UDP) in conjunction with TCP to work around this issueUser datagram protocol (UDP) is a messageoriented communication protocol that allows computing devices and applications to send data via a network without verifying its delivery which is best suited to realtime communication and broadcast systems
- What is distinctive about UDP is that it is not connectionbased
- In most cases UDP is faster than TCP because it does not assure delivery of the packets as TCP does

- The UDP protocol is not suitable it is preferred mainly for realtime applications like broadcasting or multitasking network traffic