

Networks HW#2

1. Non-persistent HTTP connections can place a burden on a Web Server especially when handling multiple requests from multiple clients. Additionally, two RTTs are required to send one object increasing delay. Persistent HTTP connections can send subsequent requests and responses over the same connection without the need to reopen a new connect for every object, reducing delay and server load.
2. FTP uses 2 TCP connection to cut down on data packet size. The headers and other information will be held in the control connection so that the data connection will contain only data and hence use less bandwidth.
3. I would prefer a Client-Server connection as I am certain that no matter my location, I can request connection to a single IP address and be certain that I will receive a connection while with P2P connections there is no guarantee that I will be able to connect to a service, depending on other peers in the network.
4. UDP will provide a faster transaction from client to server as UDP has less overhead packet data but there is the downside of potential data loss due to UDP not requiring an ACK from the recipient.
5. No, but Bob may be providing chunks to someone else on the P2P network and Alice may be receiving from someone else also. This would be due to the fact that perhaps Bob isn't in the connection path between peers for the data that Alice wishes to receive.