Module 5
Reliable Protocol

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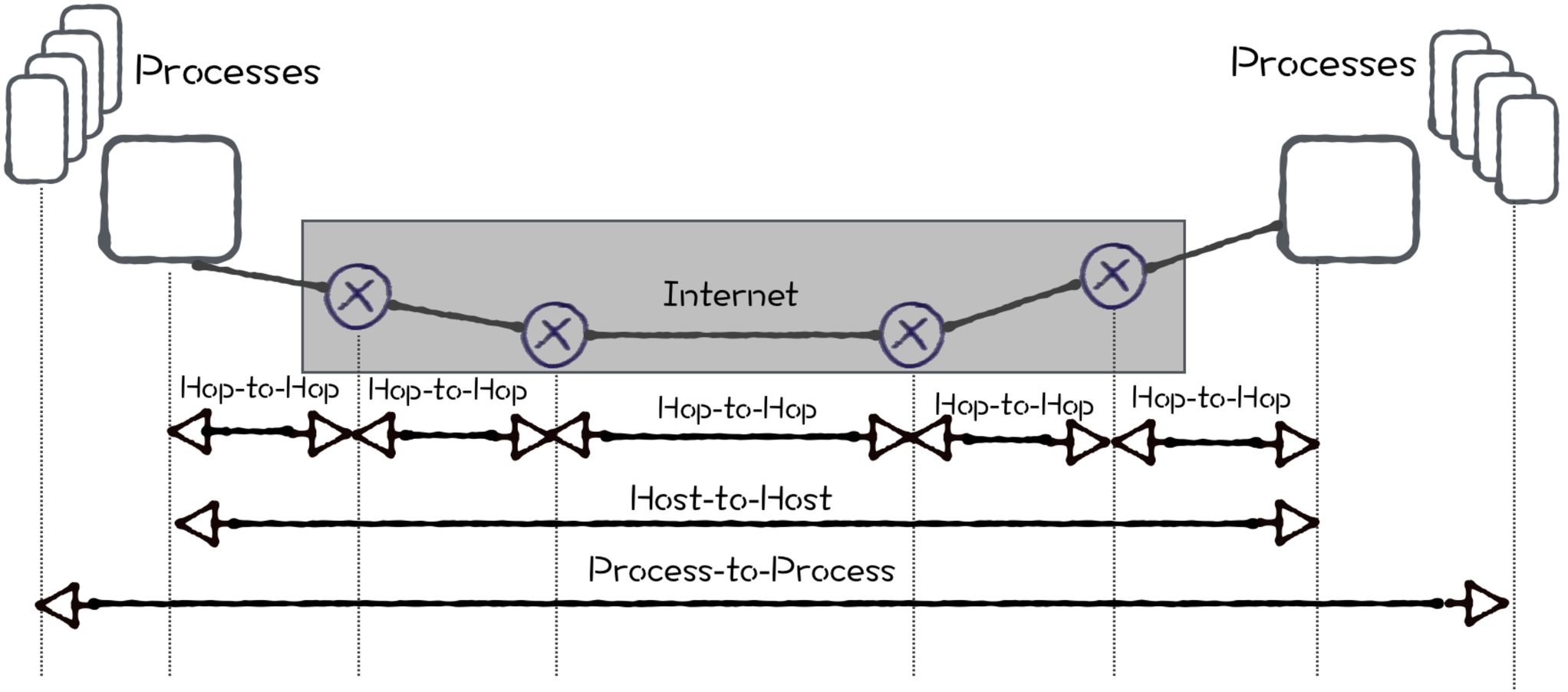
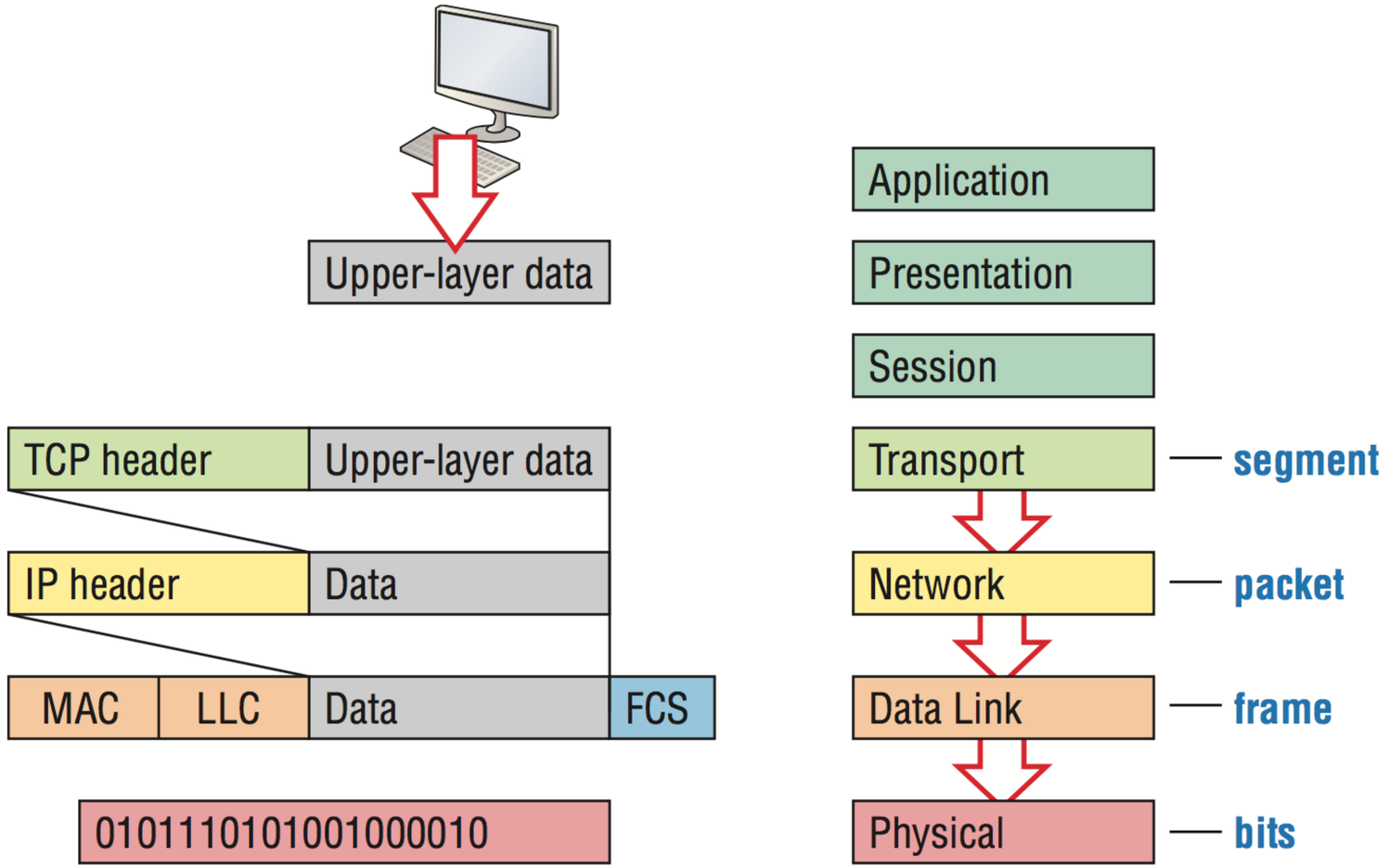
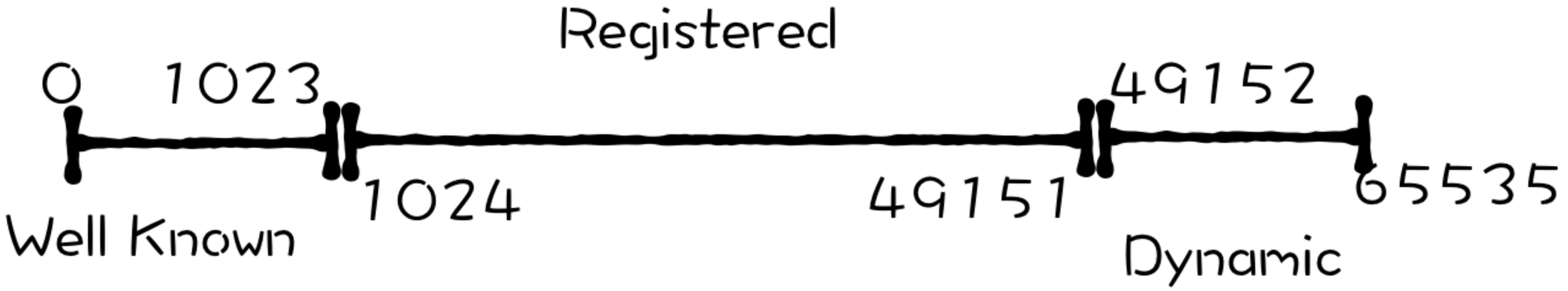
Process-to-Process Comm.



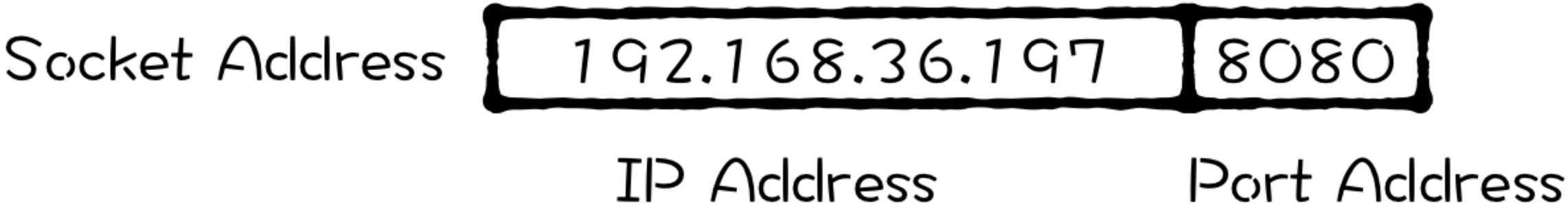
Addressing


Upper-layer data
TCP header
Upper-layer data
IP header
Data
MAC
LLC
Data
FCS
01011101010010000010
Application
Presentation
Session
Transport
segment
Network
packet
Data Link
frame
Physical
bits

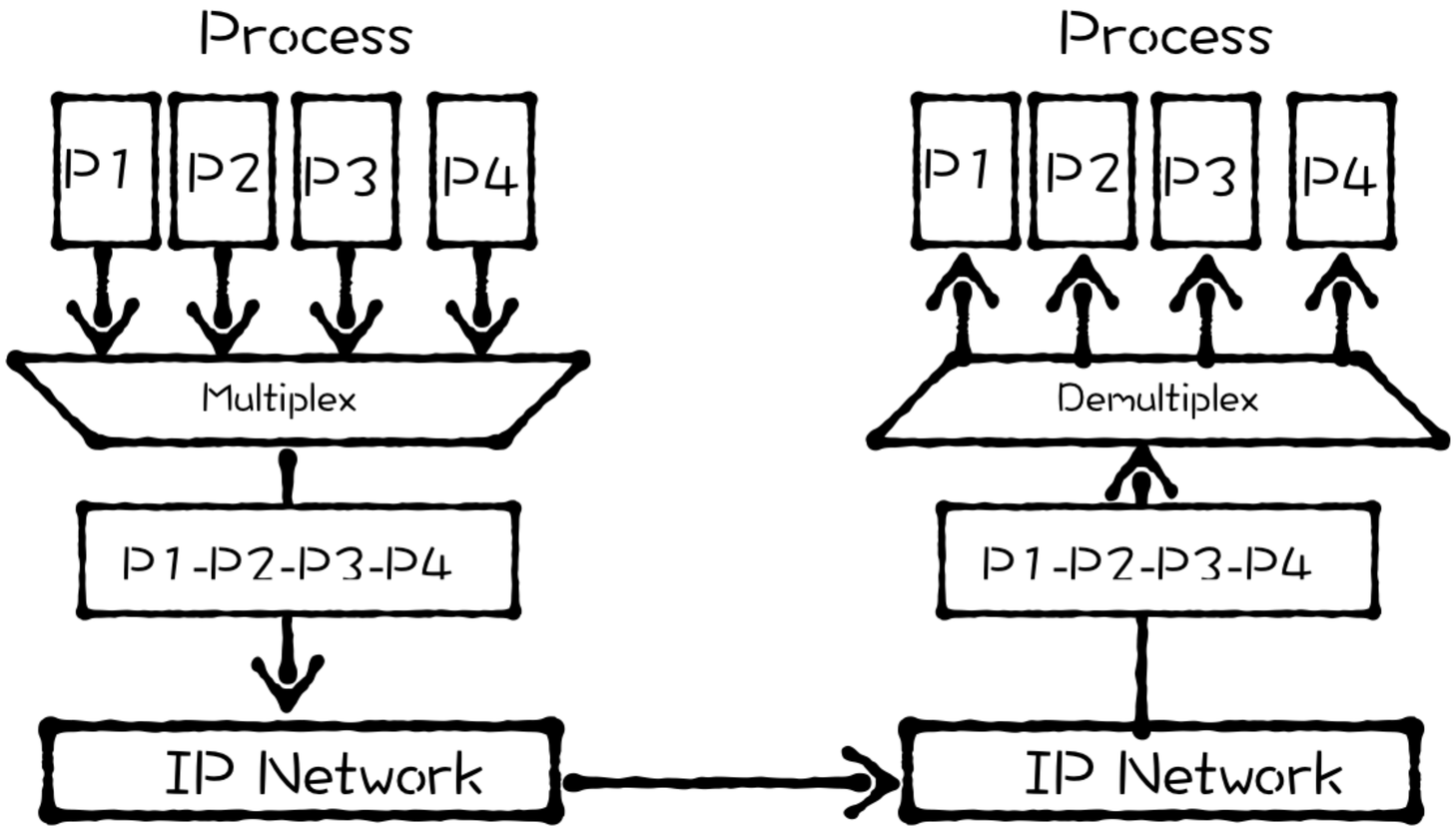
Port Address



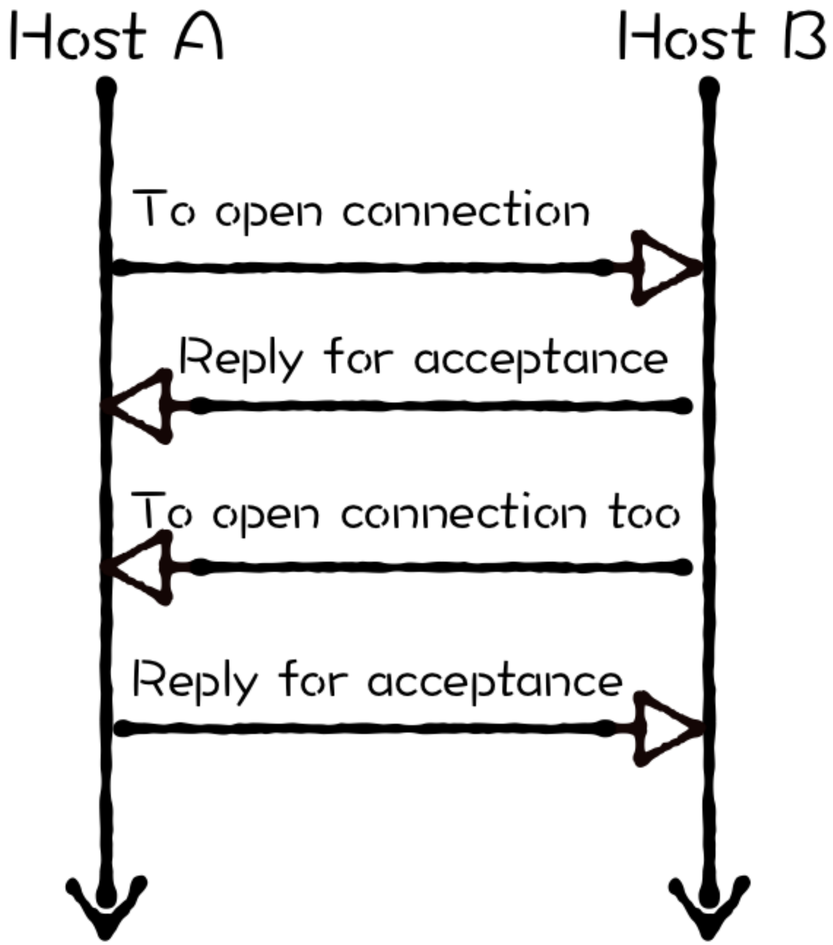
Socket Address



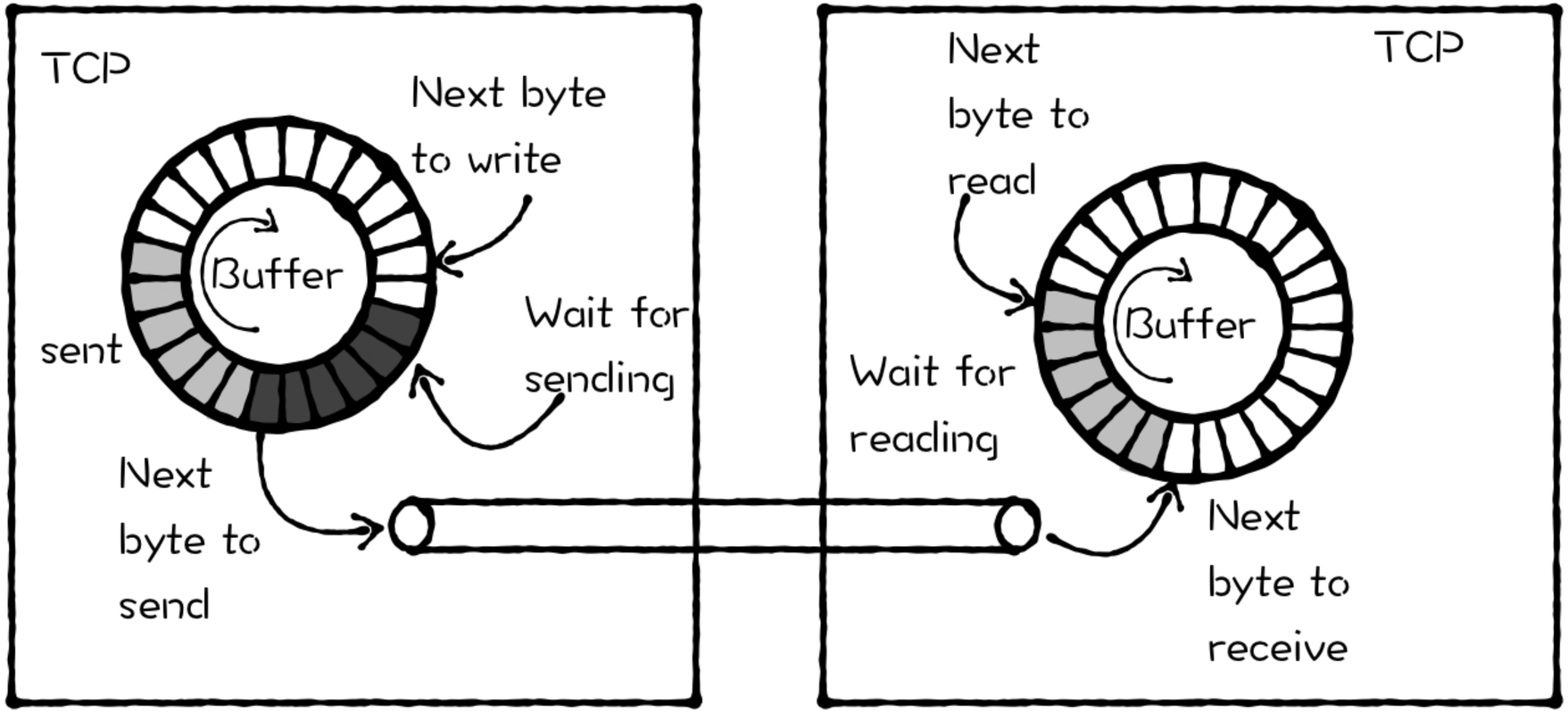
Multiplexing



Connection Establishment

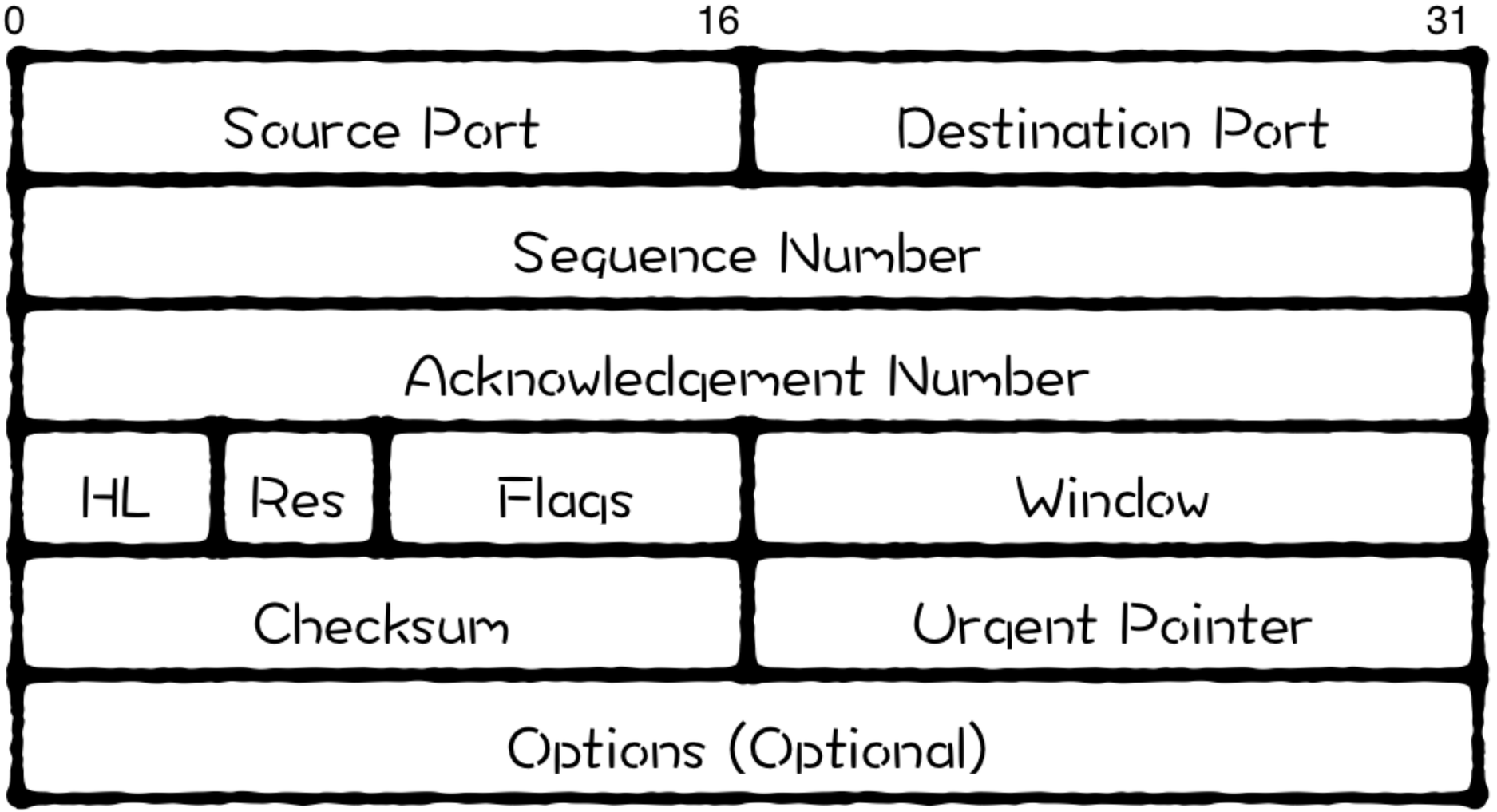


Stream Transfer

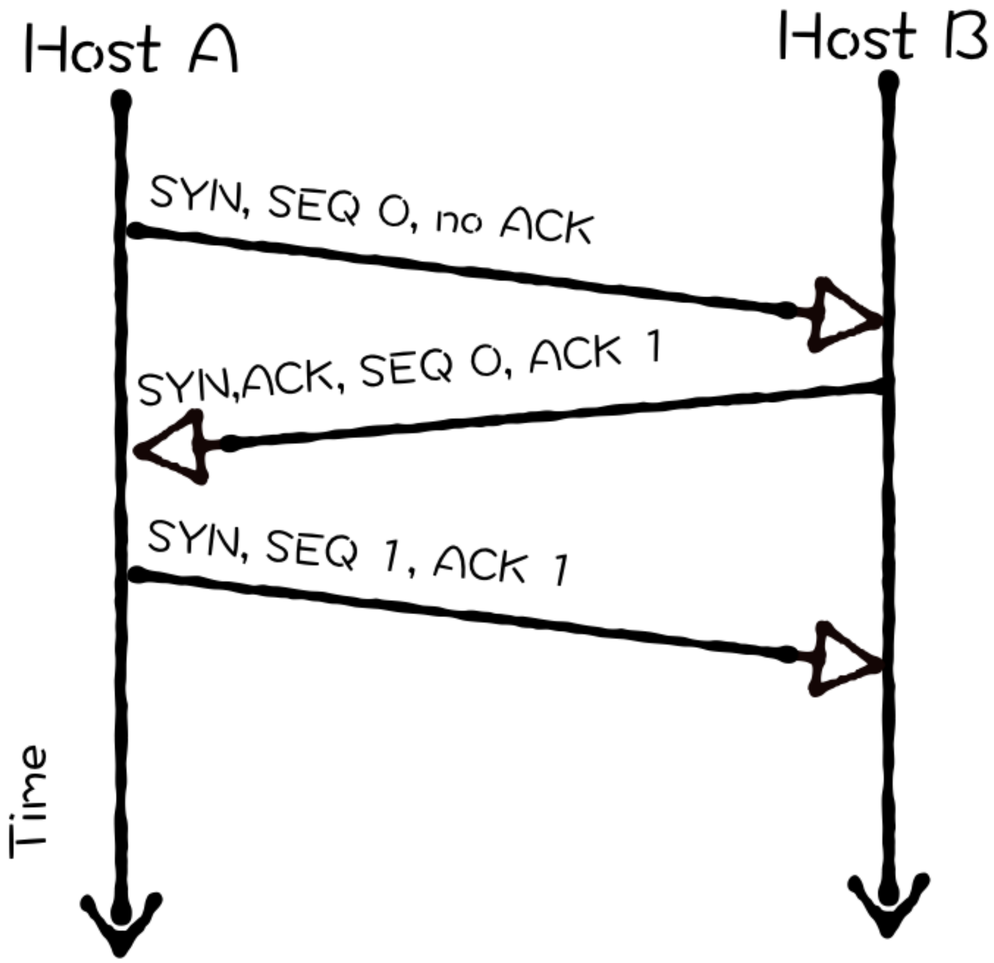


TCP Protocol

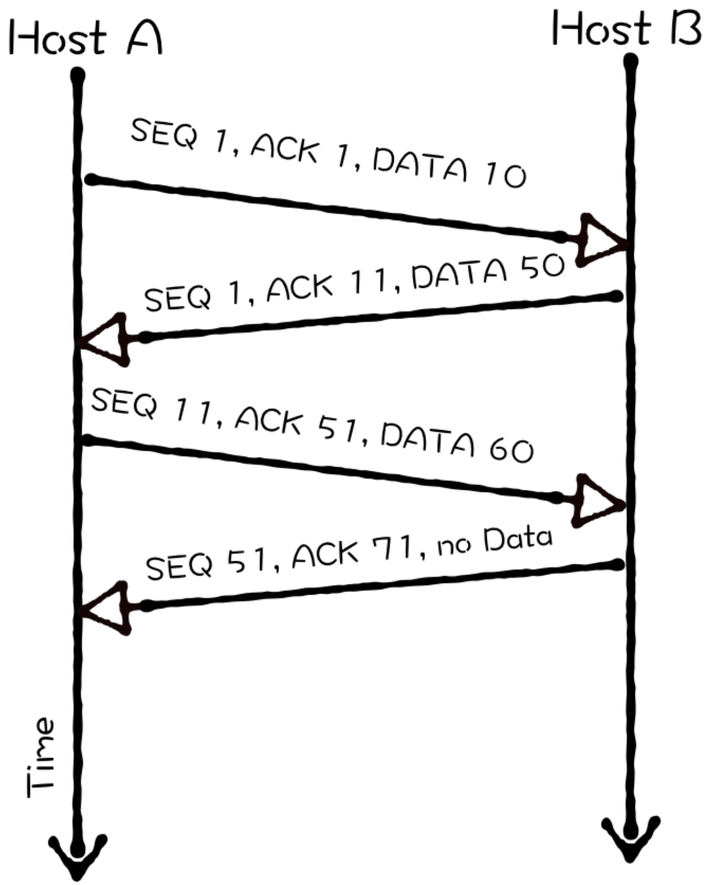
TCP Segment


0
16
31
Source Port
Destination Port
Sequence Number
Acknowledgement Number
HL
Res
Flags
Window
Checksum
Urgent Pointer
Options (Optional)

3-Ways Handshake

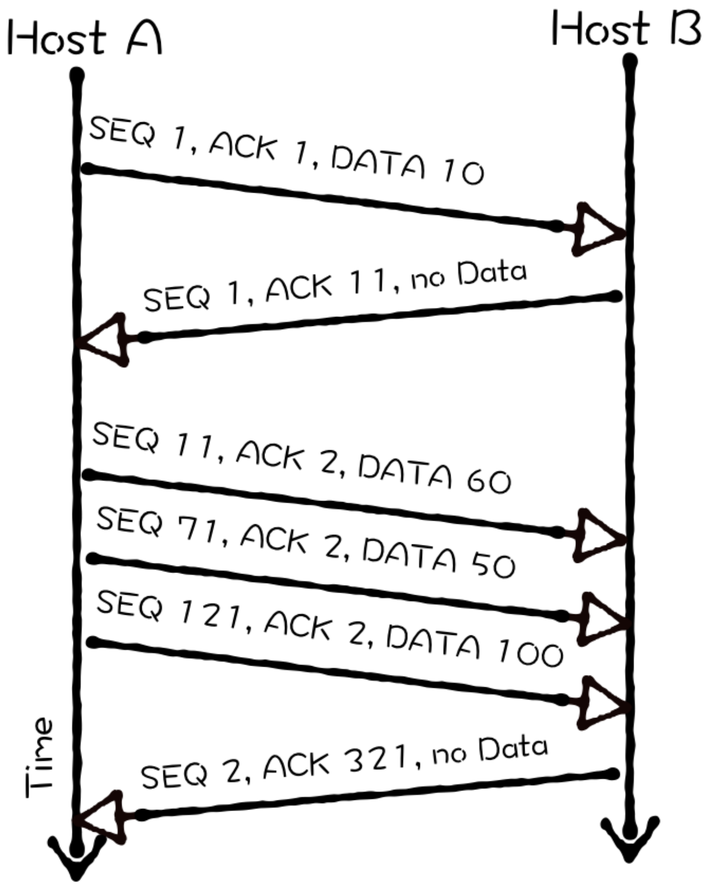


Data Transferring



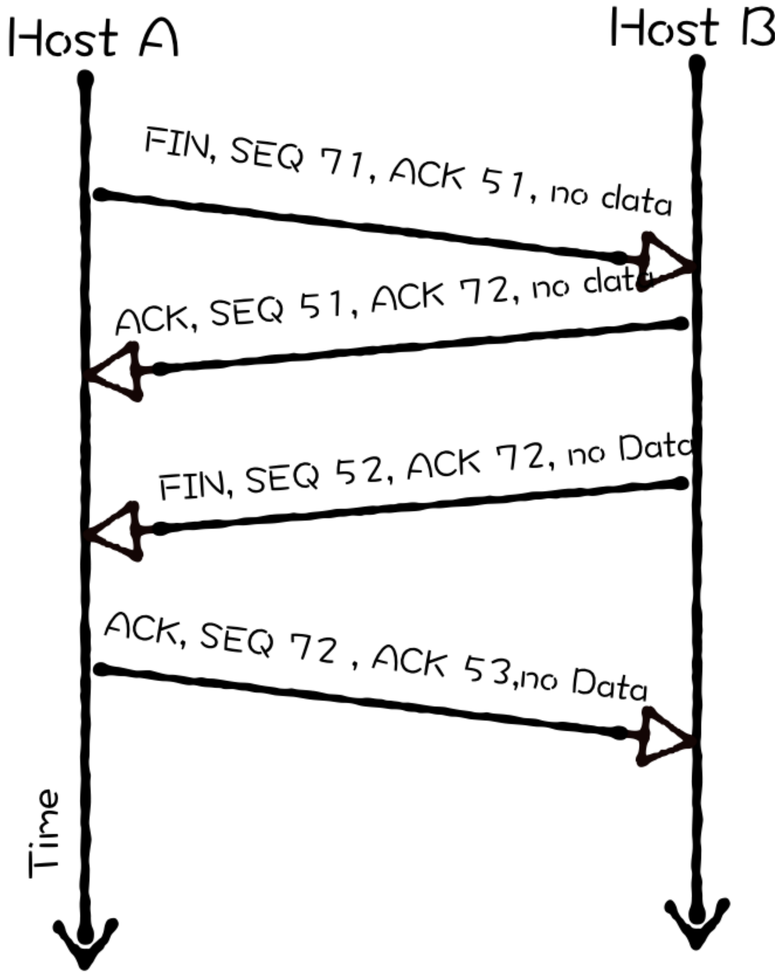
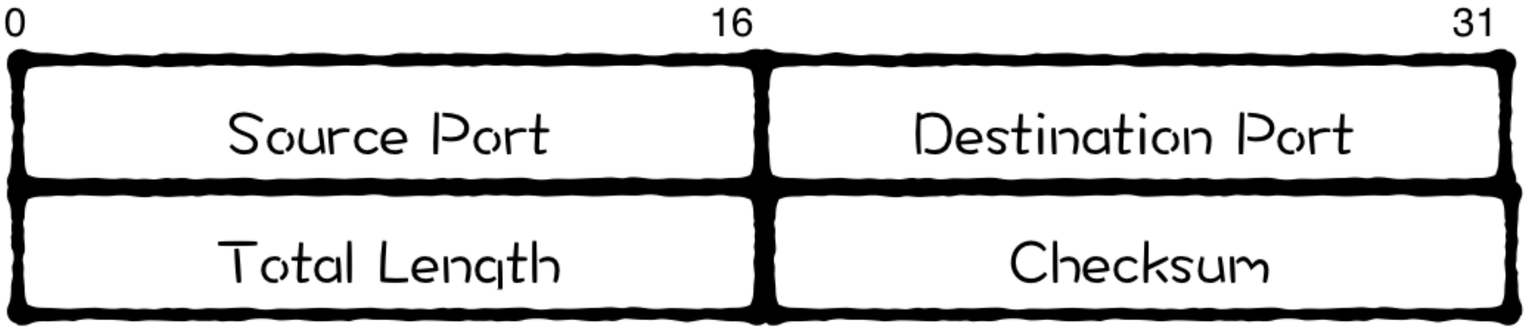
a) Two Way Communication

Data Transferring



b) Streaming Communication

Close Connection



User Defined Protocol (UDP)