Transport layer 2

TCP Flow Control - Window Size and Acknowledgements Flow Control: the amount of data that destination can receive and process reliably MSS = Maximum Segment Size B window-size 10,000, MSS 1460 send window 10,000 SEQ Receive 1-1460 SEQ 1461 Receive 1461 - 2920 ACK received ACK 2921 Send vindow 12,920 Window size 10,000 SEQ 2,921 Receive 2921-4380 ACK received ACK 4381 Send window 14,380 Window size 10,000 IPVY MSS = 1460 bytes Ethernet MTU = 1500 bytes TCP Flow Control - Congestion Avoidance Congestion -> Packets being discarded by overloaded router * TCP employs several congestion handling mechanisms, timers and algorithms.

UDP Communication

UDP provides: (1) low overhead data transport (2) no network management traffic

- Does not track SEQ numbers

- Has no way to reorder the datagrams into transmission order - Simply reassembles the data in the received order

UDP-based server apps are assigned well-known/ registered port numbers.

UDP Client Processes

- -dynamically selects a port number and uses this as the source port
- -destination port is usually well-known registered