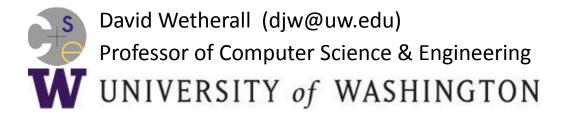
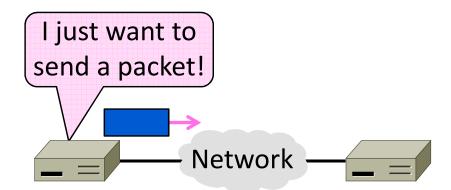
Computer Networks

User Datagram Protocol (UDP) (§6.4)



Topic

- Sending messages with UDP
 - A shim layer on packets



Computer Networks

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User Datagram Protocol (UDP)

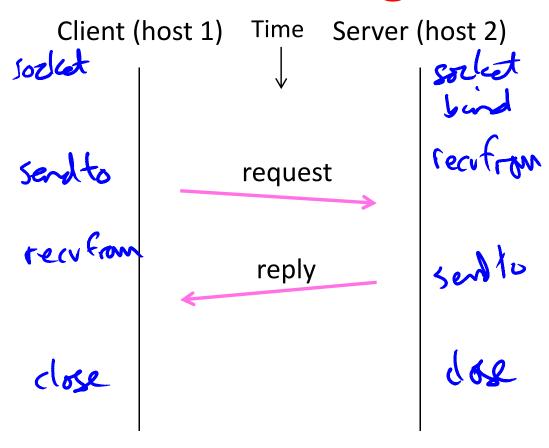
- Used by apps that don't want reliability or bytestreams
 - → Voice-over-IP (unreliable)
 - DNS, RPC (message-oriented)
 - DHCP (bootstrapping)

(If application wants reliability and messages then it has work to do!)

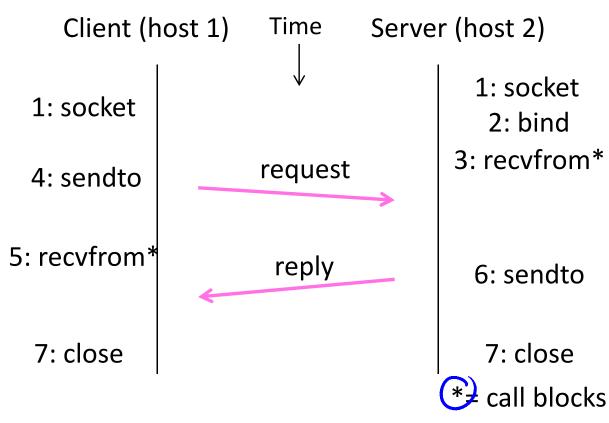
Computer Networks

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Datagram Sockets

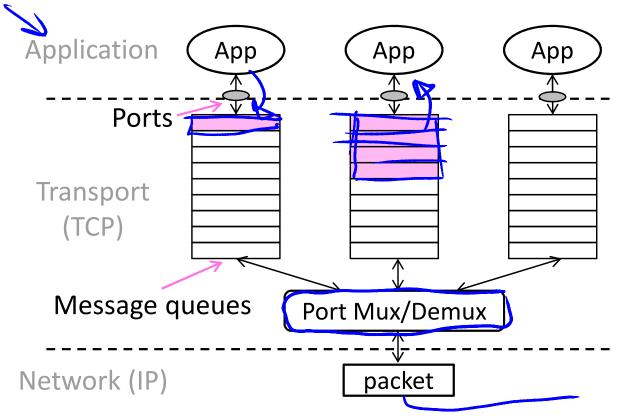


Datagram Sockets (2)



Computer Networks

UDP Buffering



Computer Networks

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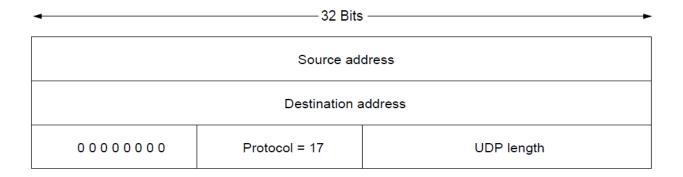
UDP Header

- Uses ports to identify sending and receiving application processes
- Datagram length up to 64K
- Checksum (16 bits) for reliability

	32 Bits —	
5	Source port	Destination port
1	UDP length	UDP checksum

UDP Header (2)

- Optional checksum covers UDP segment and IP pseudoheader
 - Checks key IP fields (addresses)
 - Value of zero means "no checksum"



END

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