

Computer Networks

User Datagram Protocol (UDP) (§6.4)



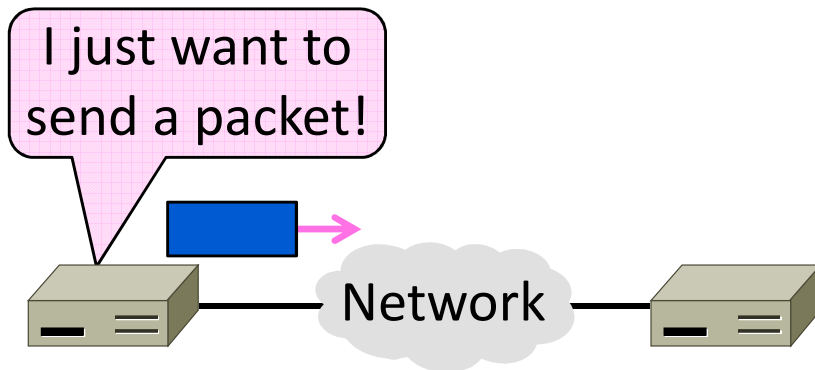
David Wetherall (djw@uw.edu)

Professor of Computer Science & Engineering

UNIVERSITY *of* WASHINGTON

Topic

- Sending messages with UDP
 - A shim layer on packets



User Datagram Protocol (UDP)

- Used by apps that don't want reliability or bytestreams

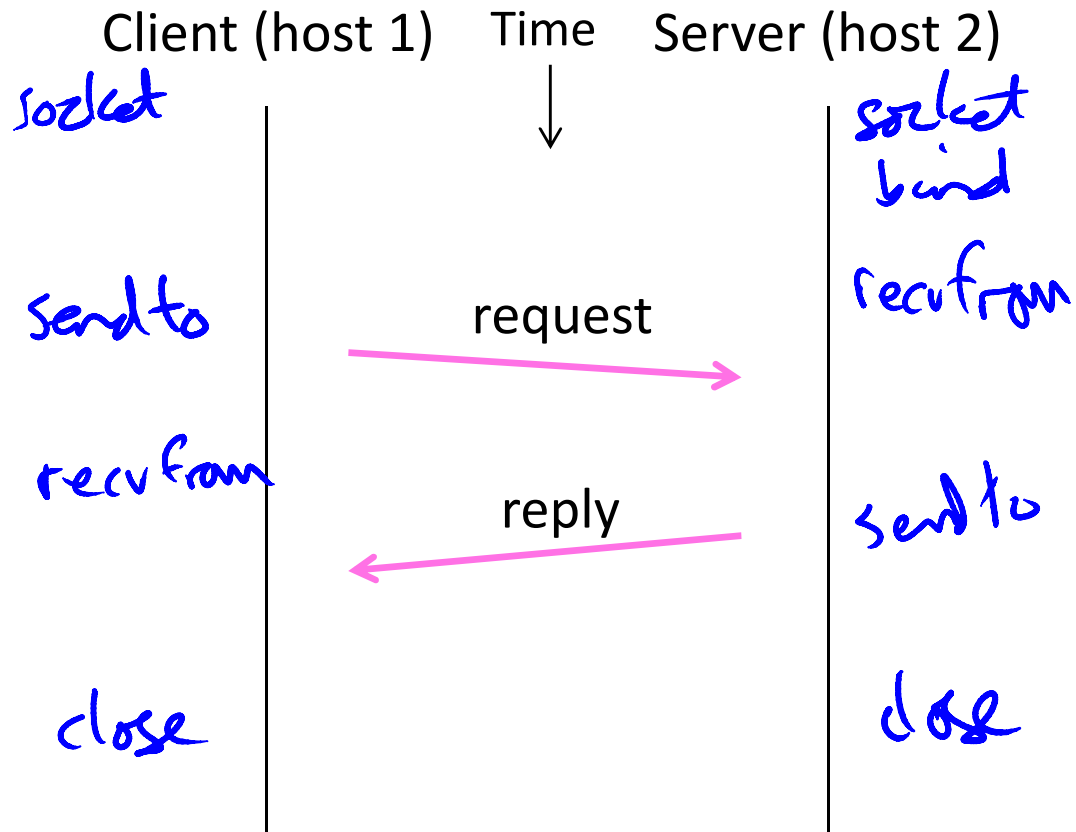
➤ Voice-over-IP (unreliable)

➤ DNS, RPC (message-oriented)

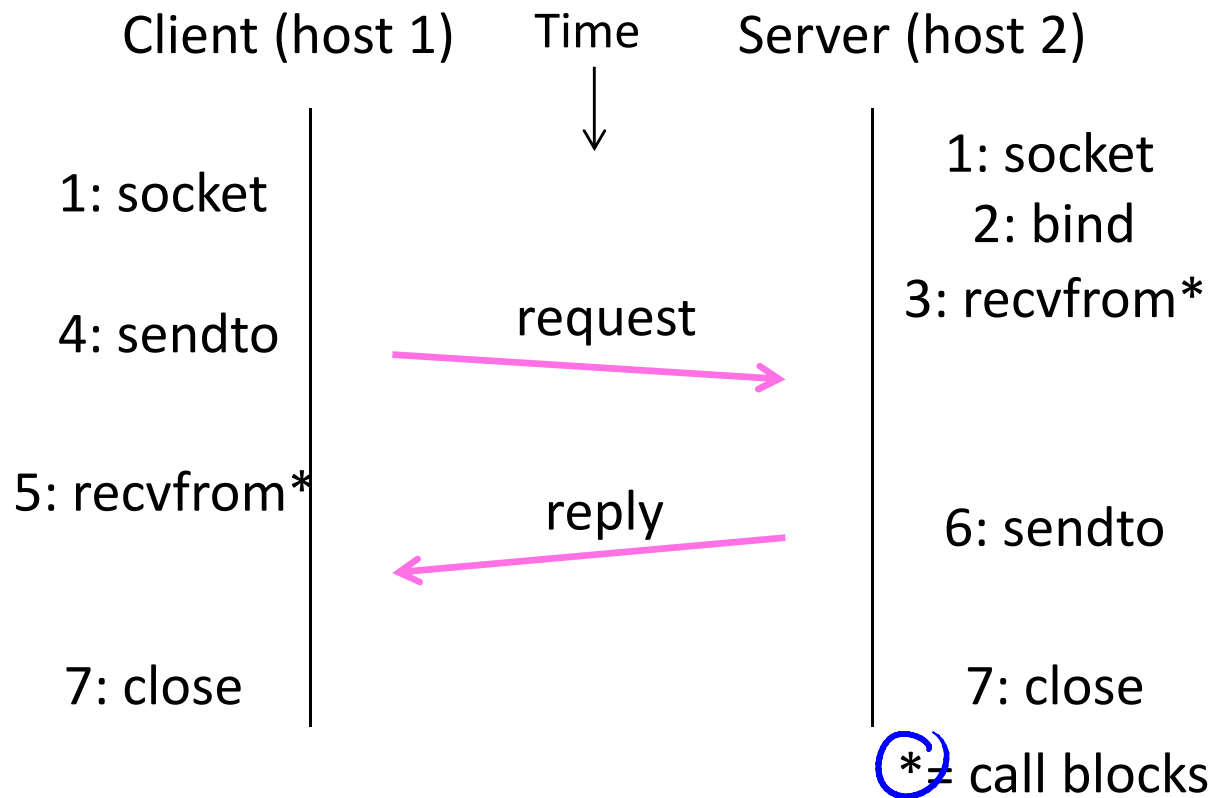
➤ DHCP (bootstrapping)

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

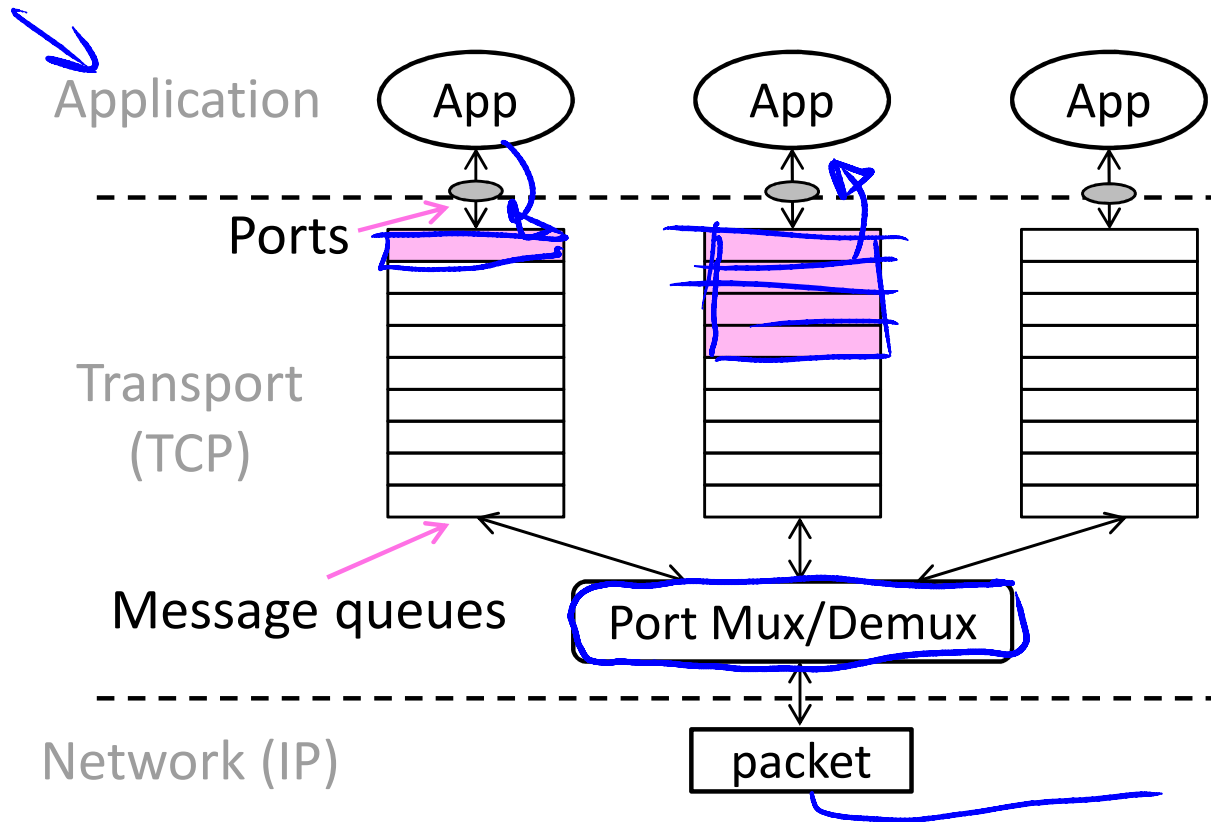
Datagram Sockets



Datagram Sockets (2)

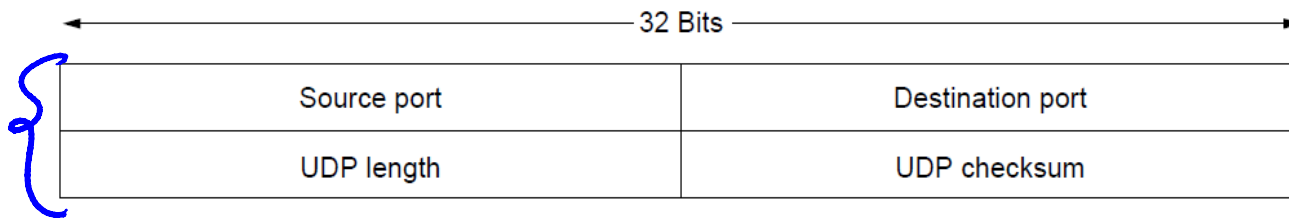


UDP Buffering



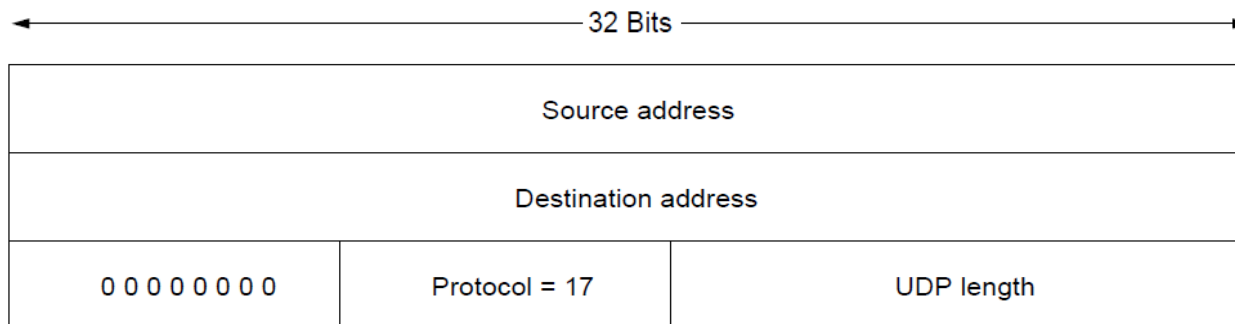
UDP Header

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



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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