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Chapter 3.2 Multiplexing and Demultiplexing

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3.2.1 Overview

- When *multiplexing at the sender*, data must be handled from multiple sockets, and a transport header must be added, which is used later for demultiplexing.
- When *demultiplexing at the receiver*, the header info is used to deliver the received segments to the correct socket.

3.2.2 How Demultiplexing Works

- The host receives IP datagrams. Each datagram has a source and destination *IP address* and carries *one transport-layer segment*. They also have a source and destination *port number*.
- The host uses the IP address and port numbers to send the segment to the appropriate socket.
- In a **connectionless demux**, a datagram with the *same destination port number* will be sent to the *same socket* regardless of source info.
- See example of a connectionless demux on slide 3-11.
- In a **connection-oriented demux**, *all four header values* are used to determine destination socket.
- See example of a connectionless demux on slide 3.13.