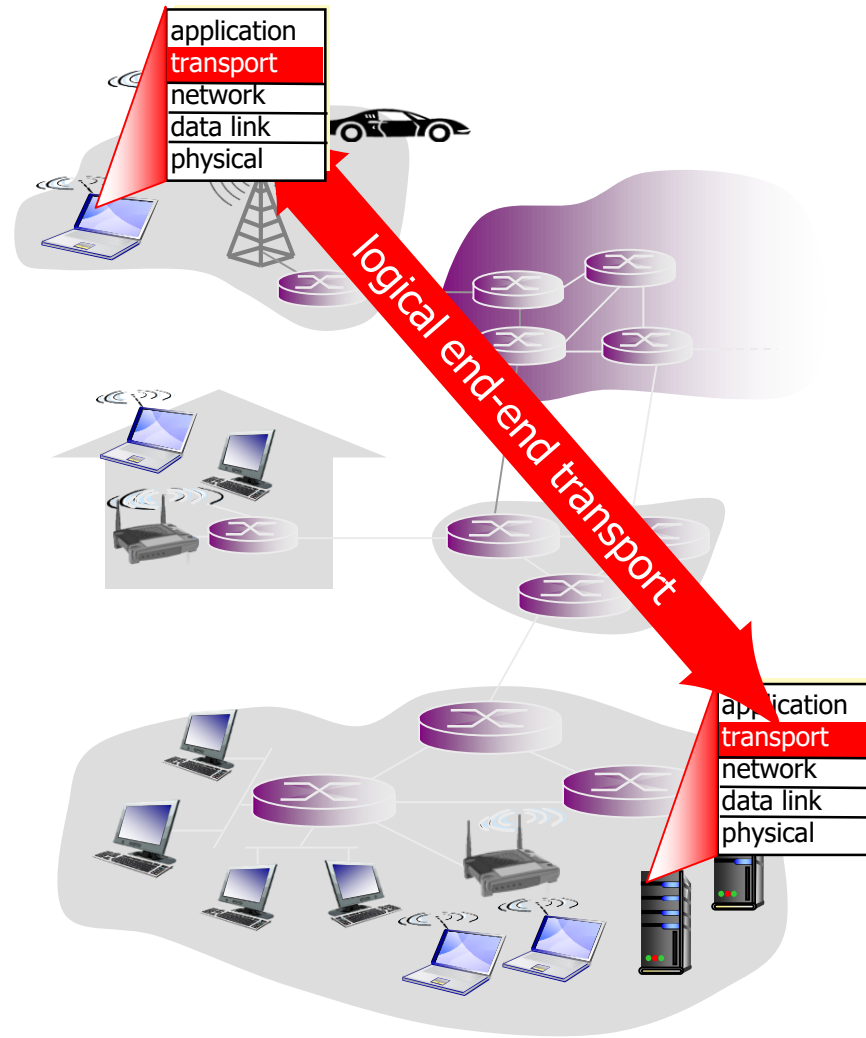


# Transport Layer

Peler Levinsky, Roskilde IT

27.08.2024

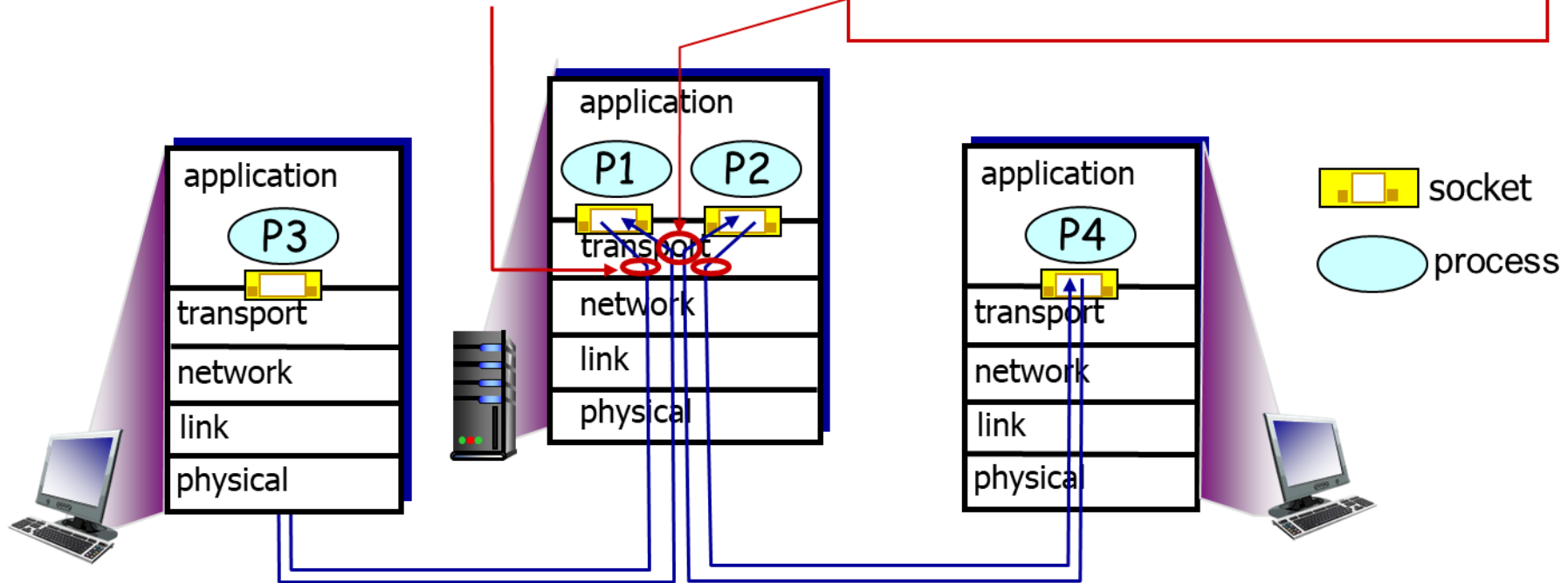
# Transport level

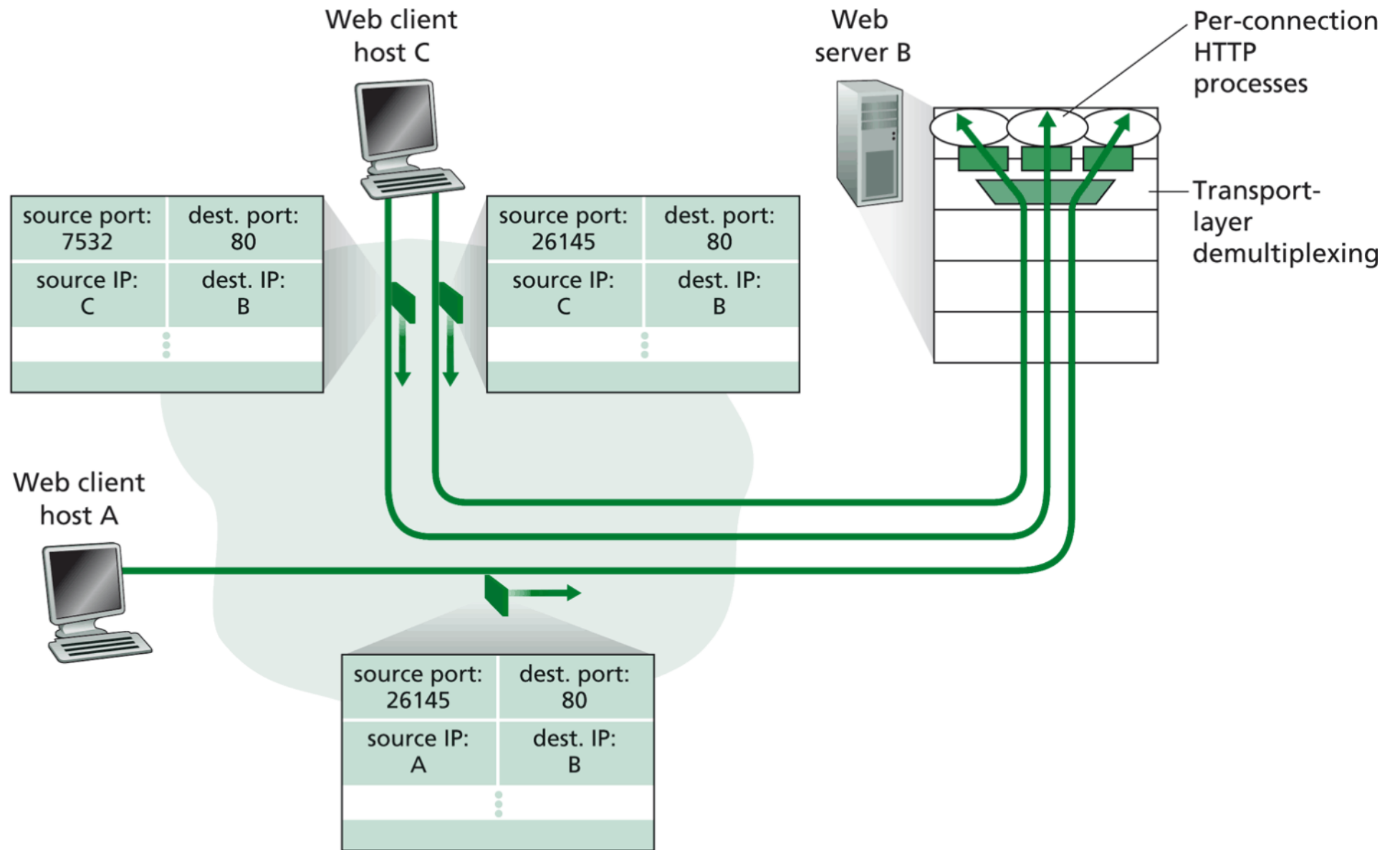


# Multiplexing/demultiplexing

*multiplexing at sender:*  
handle data from multiple sockets, add transport header (later used for demultiplexing)

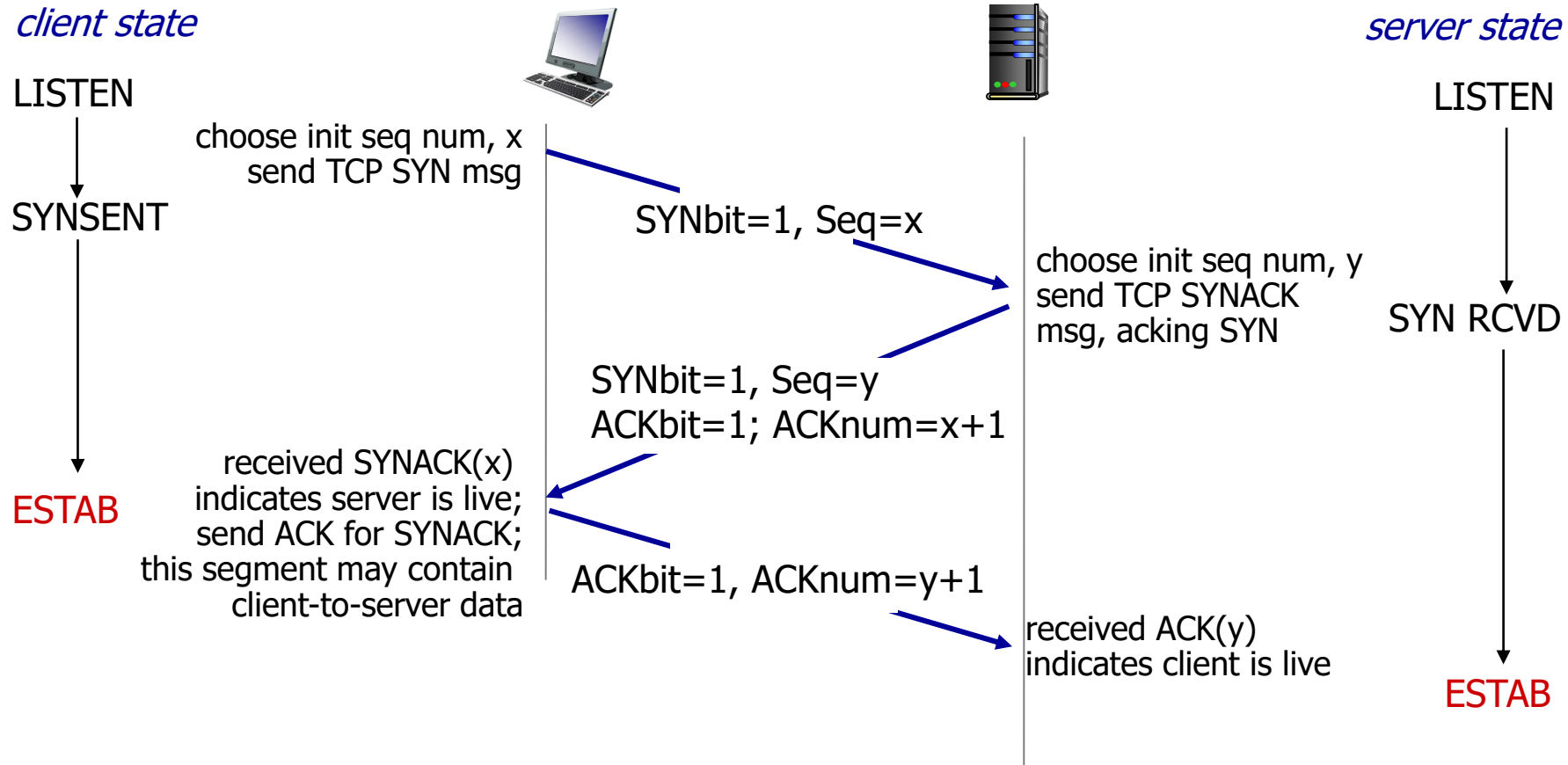
*demultiplexing at receiver:*  
use header info to deliver received segments to correct socket



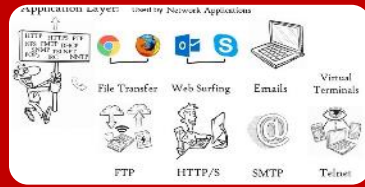


**Figure 3.5** ♦ Two clients, using the same destination port number (80) to communicate with the same Web server application

# TCP 3-way handshake

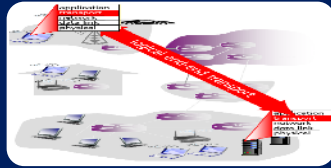


# Protokol- stakken



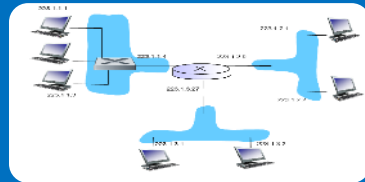
## Application

- Web (HTTP/HTTPS), Email, DNS, DHCP, FTP, ...



## Transport

- TCP - reliable, connection oriented
- UDP - unreliable, connectionless



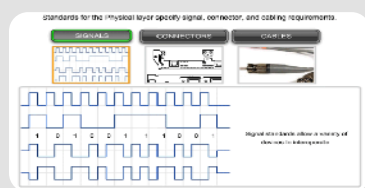
## Network

- IP - IP-packets, unreliable
- IP-addresses



## Datalink

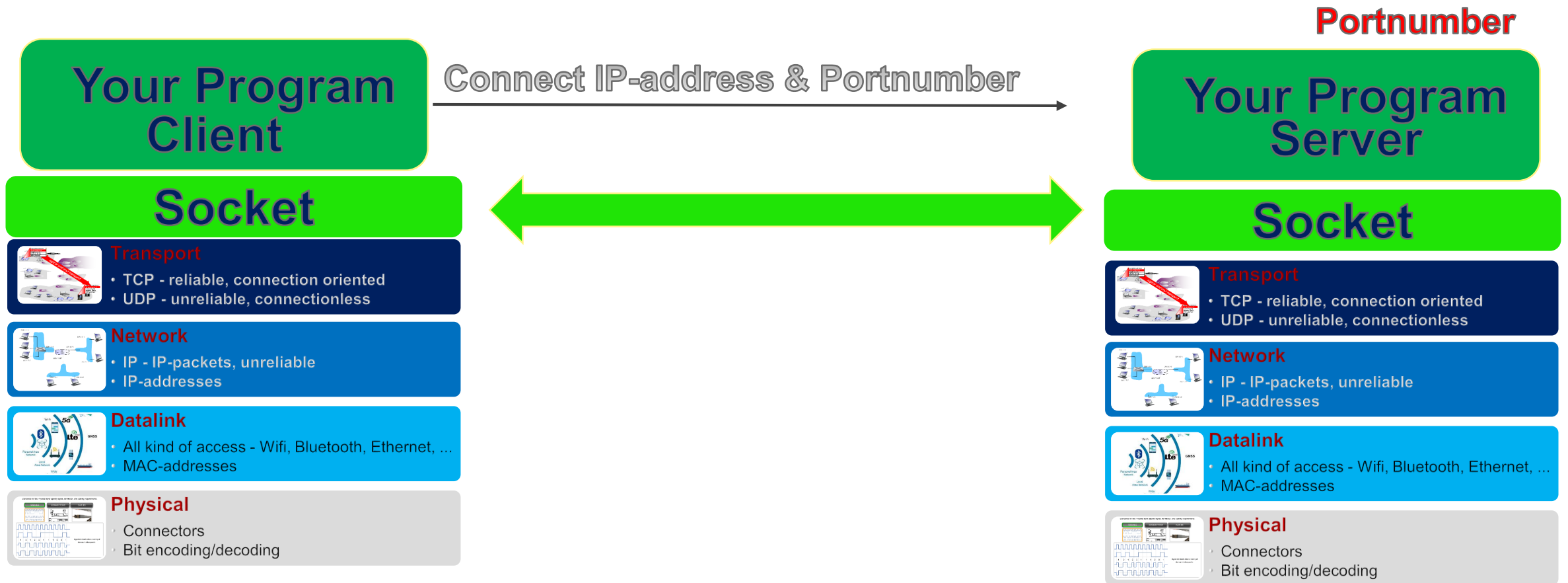
- All kind of access - Wifi, Bluetooth, Ethernet, ...
- MAC-addresses



## Physical

- Connectors
- Bit encoding/decoding

# TCP – Socket - Programming



# Small Demo – then your turn

