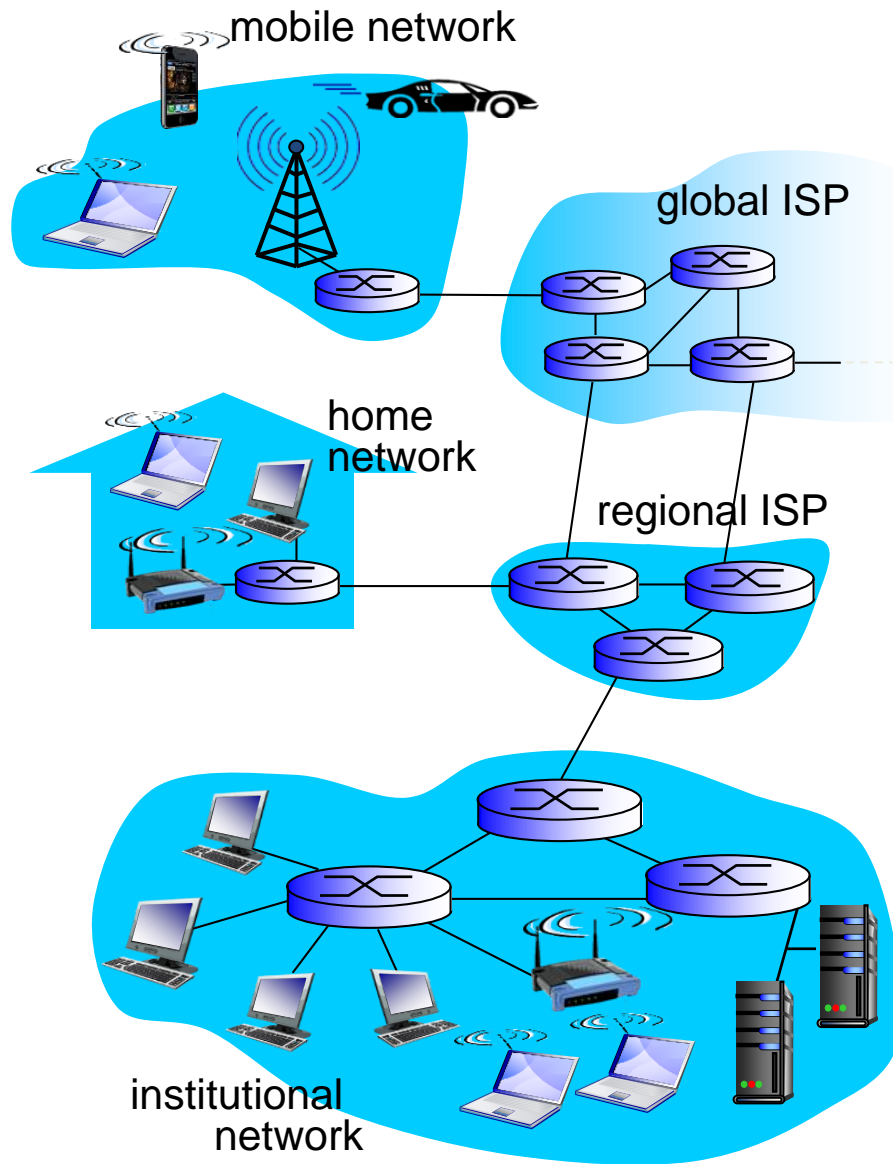
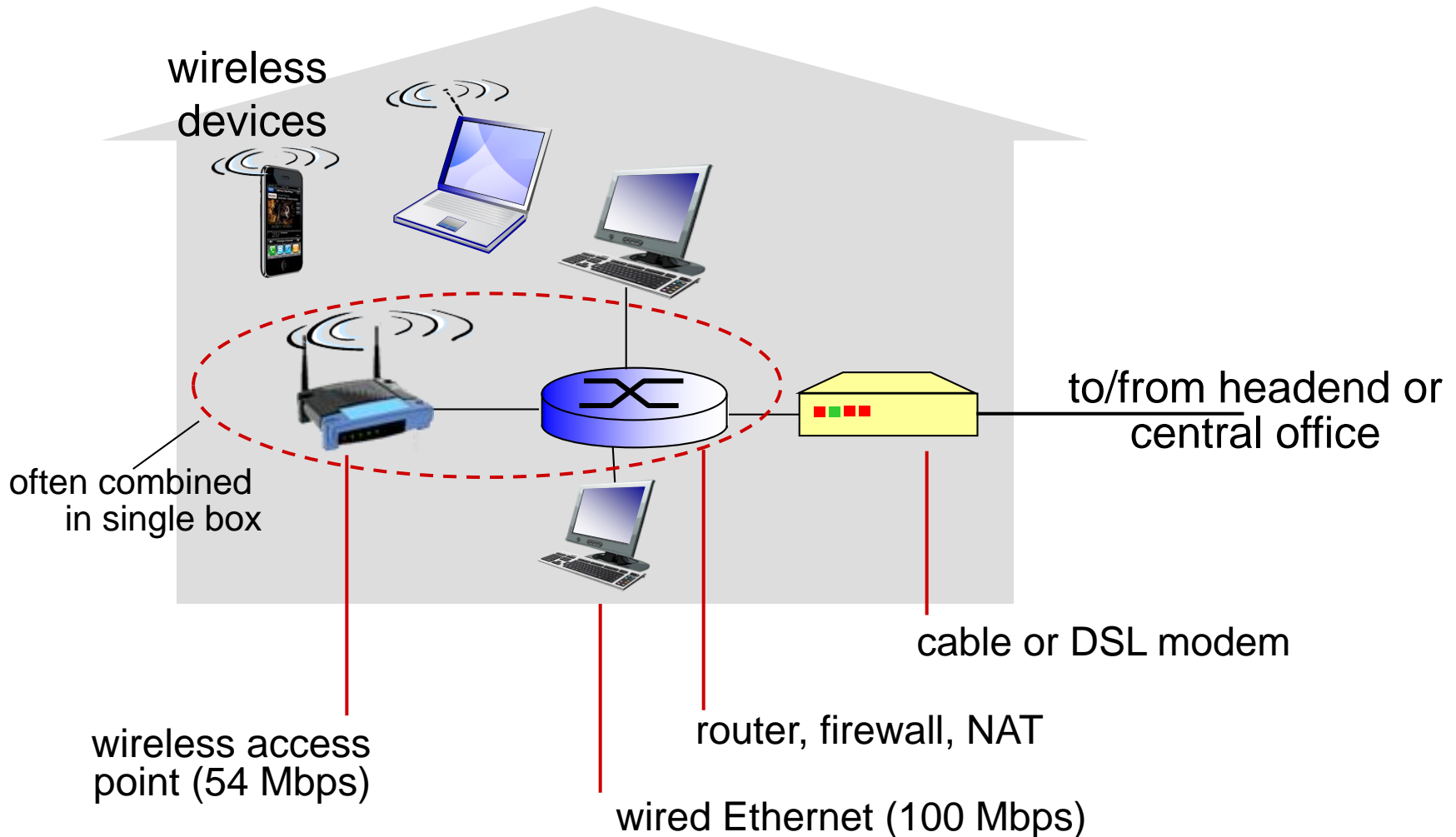


Introduction to Computer Networks



Access net: home network

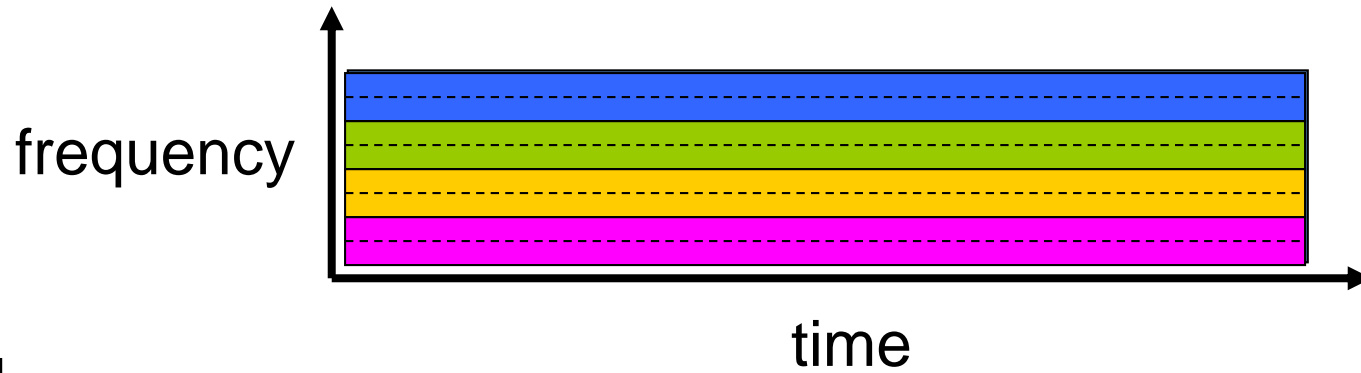


Circuit switching: FDM versus TDM

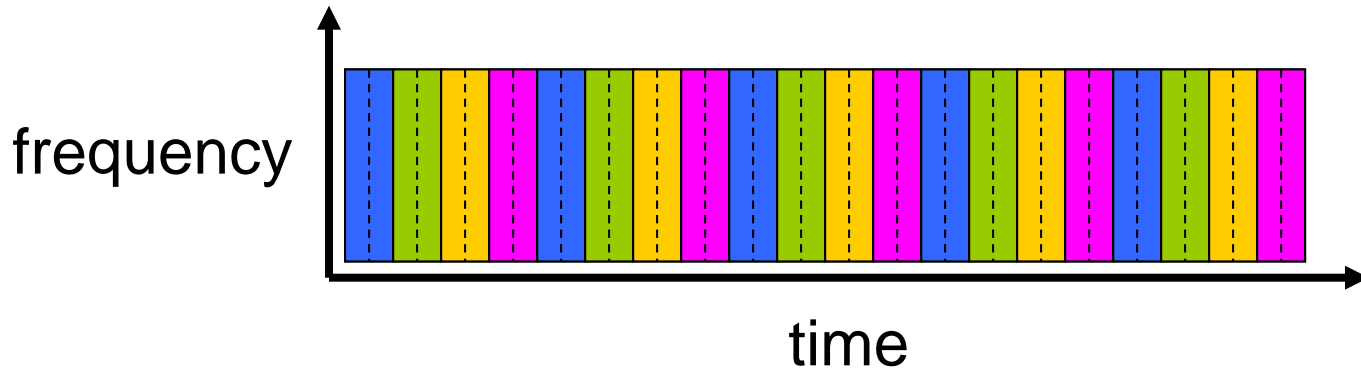
FDM

Example:

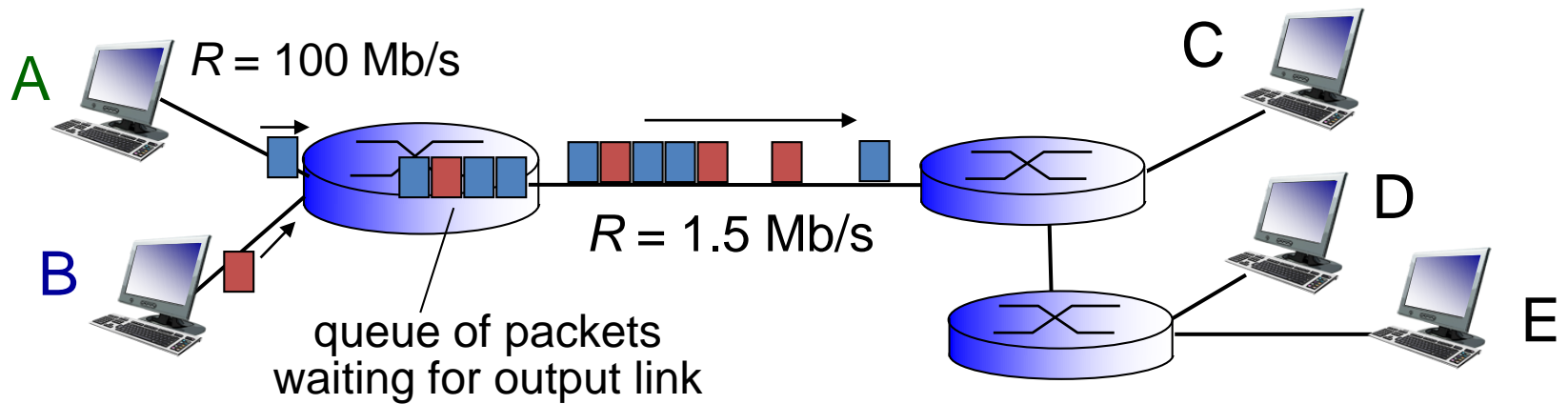
4 users

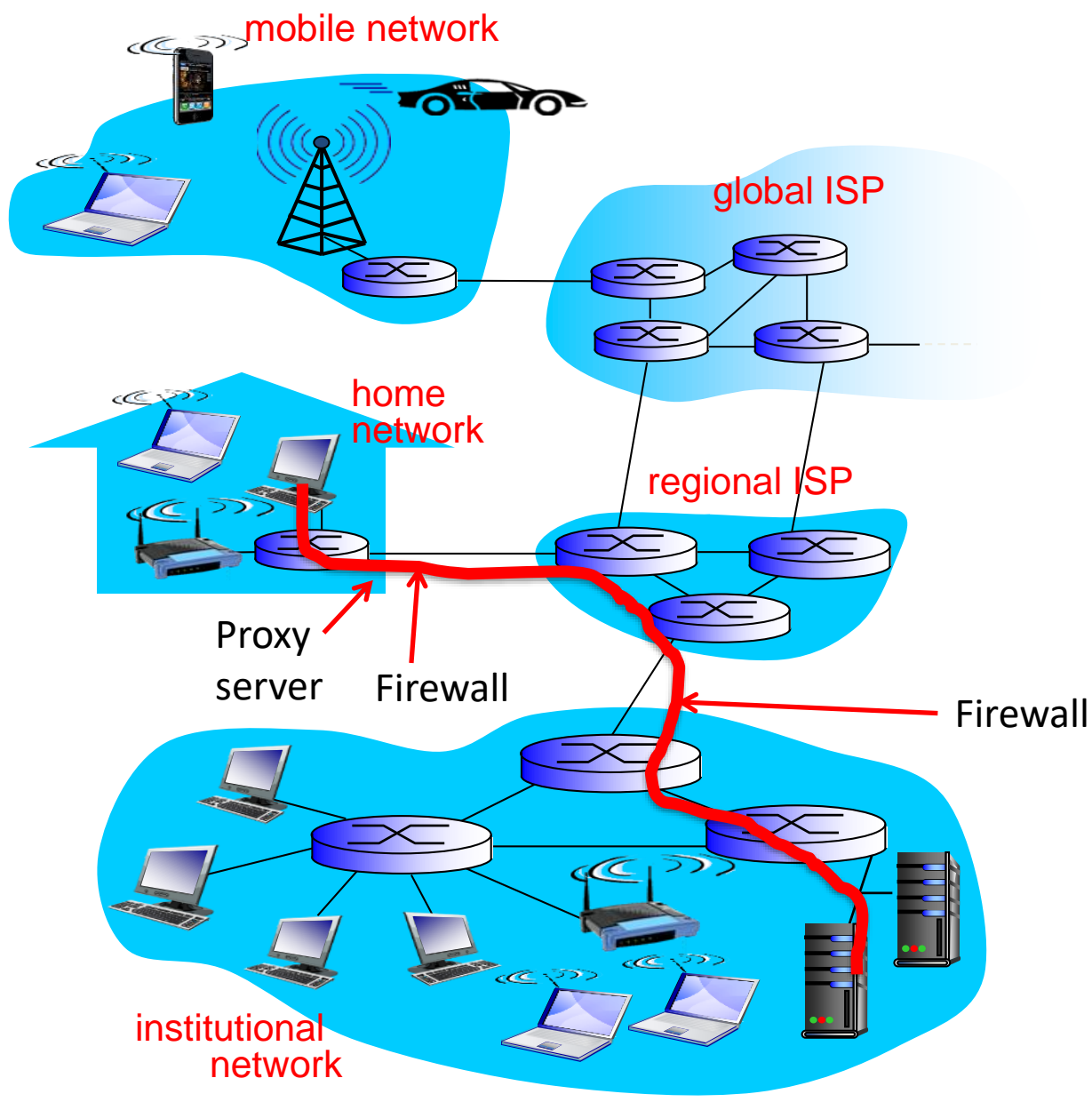


TDM



Packet Switching: queueing delay, loss





Organization of air travel

ticket (purchase)

ticket (complain)

baggage (check)

baggage (claim)

gates (load)

gates (unload)

runway takeoff

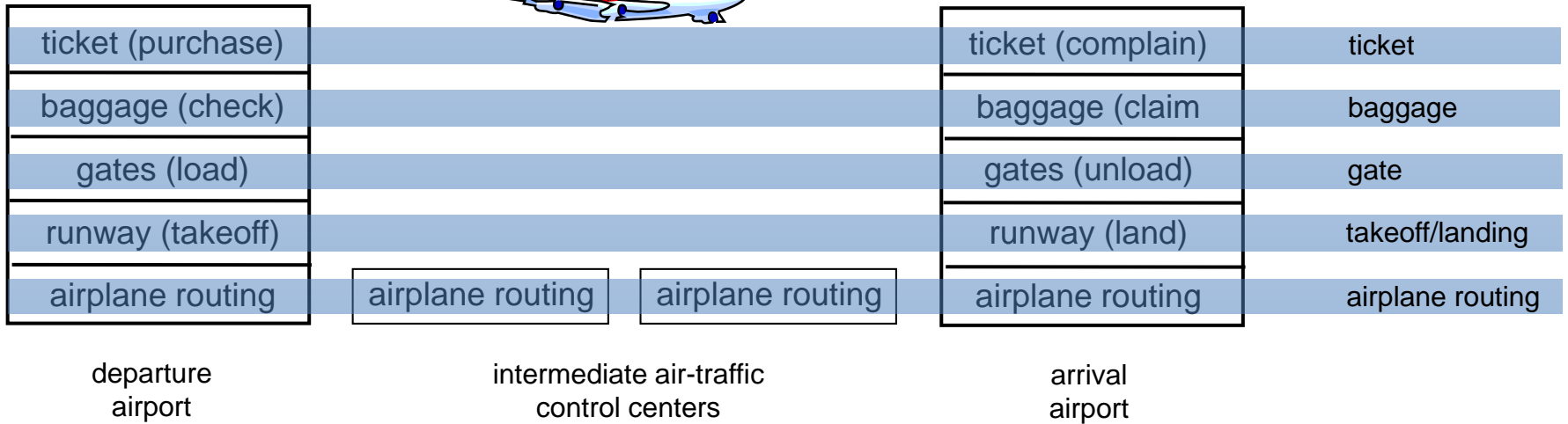
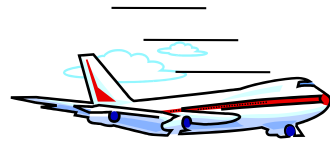
runway landing

airplane routing

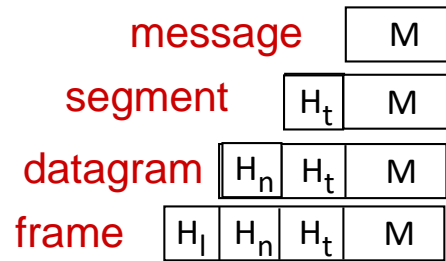
airplane routing

airplane routing

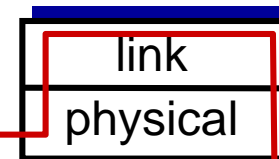
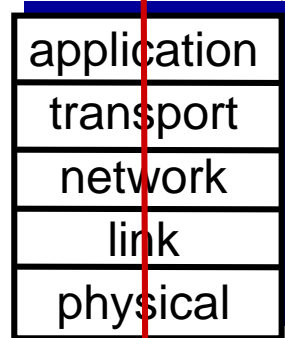
Layering of airline functionality



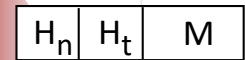
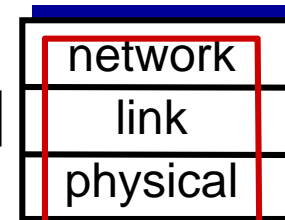
Encapsulation



source

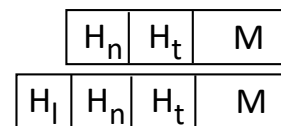
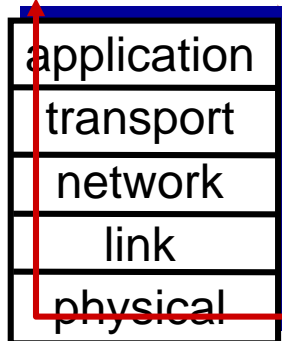


switch



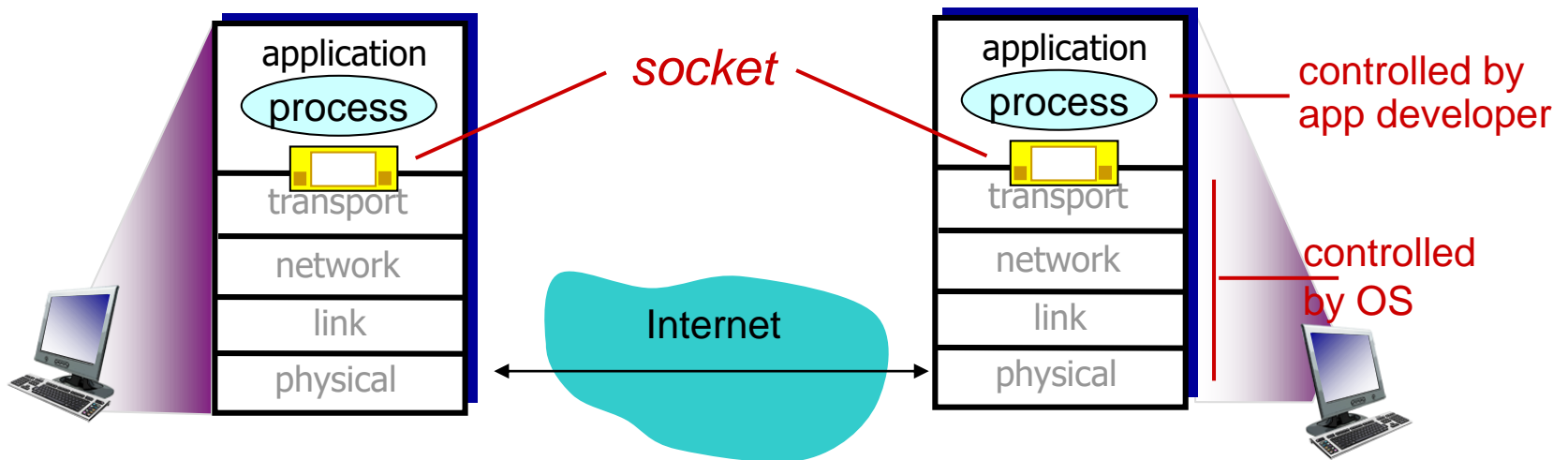
router

destination



Sockets

- process sends/receives messages to/from its **socket**
- socket analogous to door
 - sending process shoves message out door
 - sending process relies on transport infrastructure on other side of door to deliver message to socket at receiving process



How to Program – Socket programming

