MIT OpenCourseWare http://ocw.mit.edu

6.033 Computer System Engineering Spring 2009

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.

## Layers

E2E
Network
Link  $\rightarrow D \rightarrow A \rightarrow D$ Sender

# Bit-stuffing

end = 111

sndr:  $111 \rightarrow 1110$ 

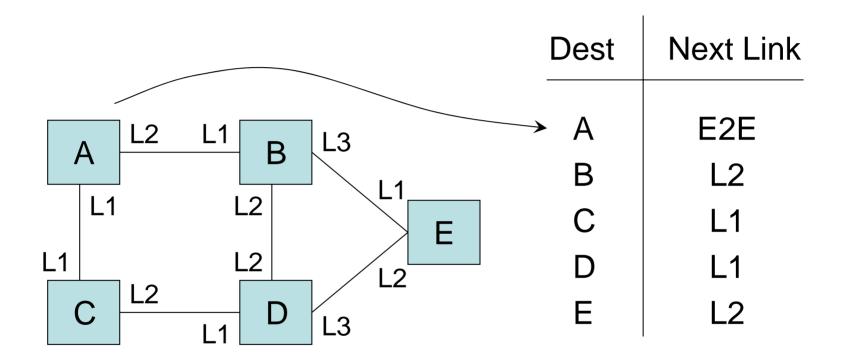
rcvr: 1110 → 111

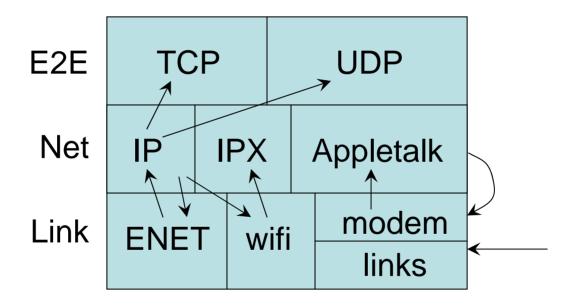
net: 1111 net: 1110

link: 11101 link: 11100

# **Network Layer**

- 1) forwarding
- 2) rating





# Routing

- 1) Scalable
- 2) Robust
- 3) Distributed

# Routing

## "Soft State"

#### 2 steps:

- Advertisement
- Integration

Issue: Scalability

Soln: Hierarchy

Autonomous systems (ASes)

