Data Communication and Computer Networks [EEE 314]

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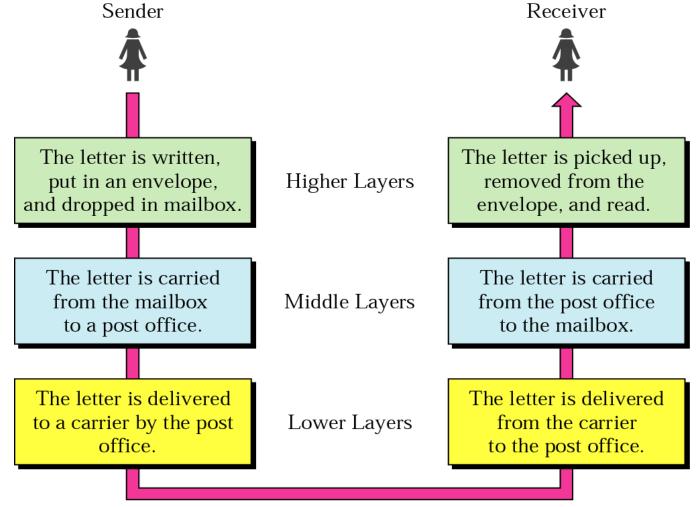
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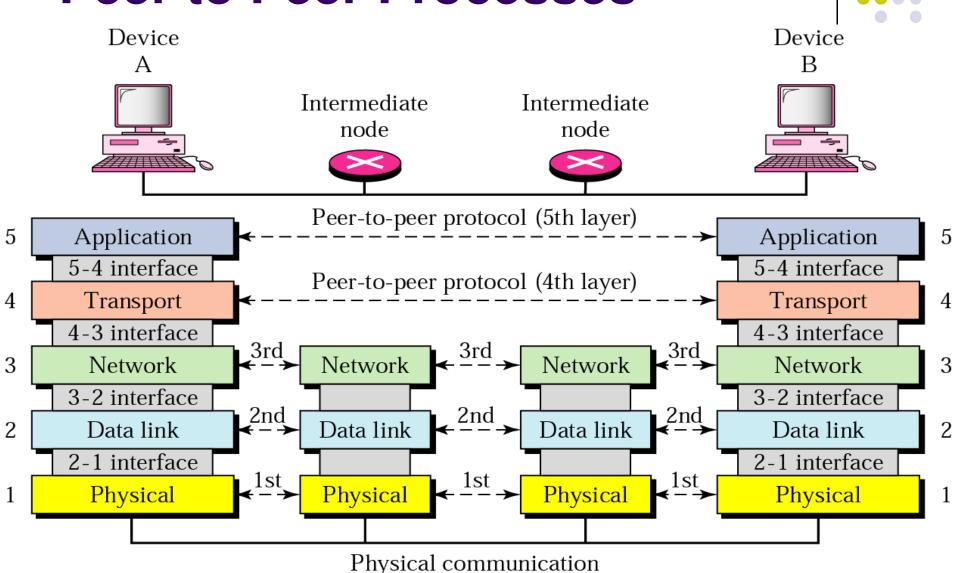
The parcel is carried from the source to the destination.





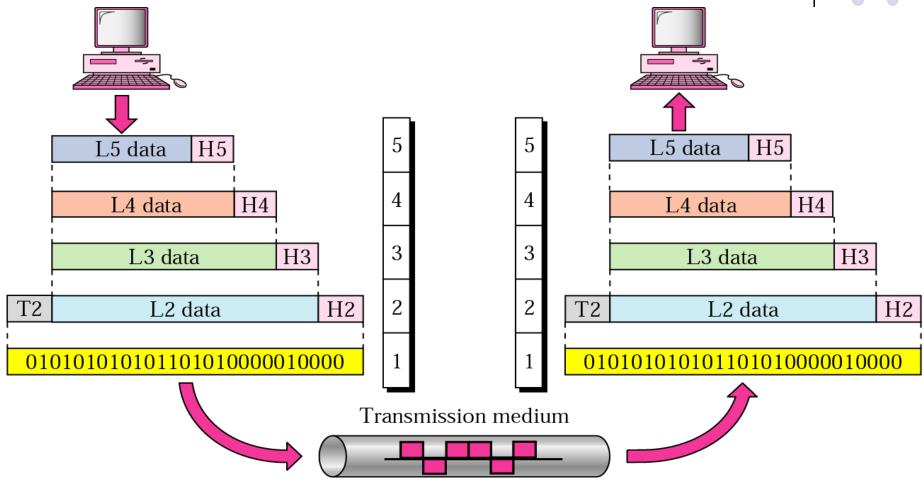
5	Application
4	Transport
3	Network
2	Data link
1	Physical





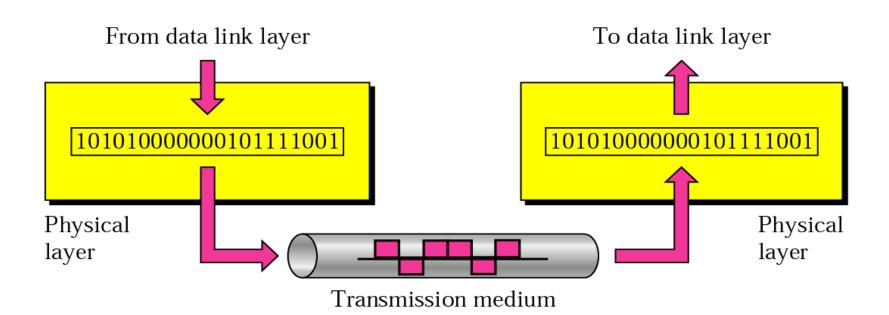
An Exchange using Internet Model











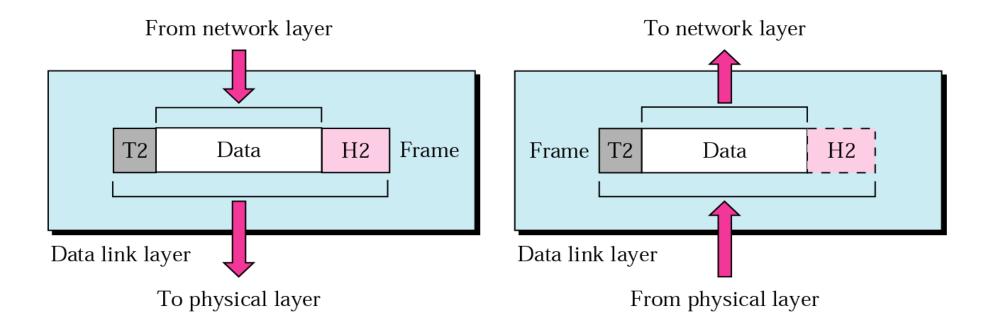




The physical layer is responsible for transmitting individual bits from one node to the next.





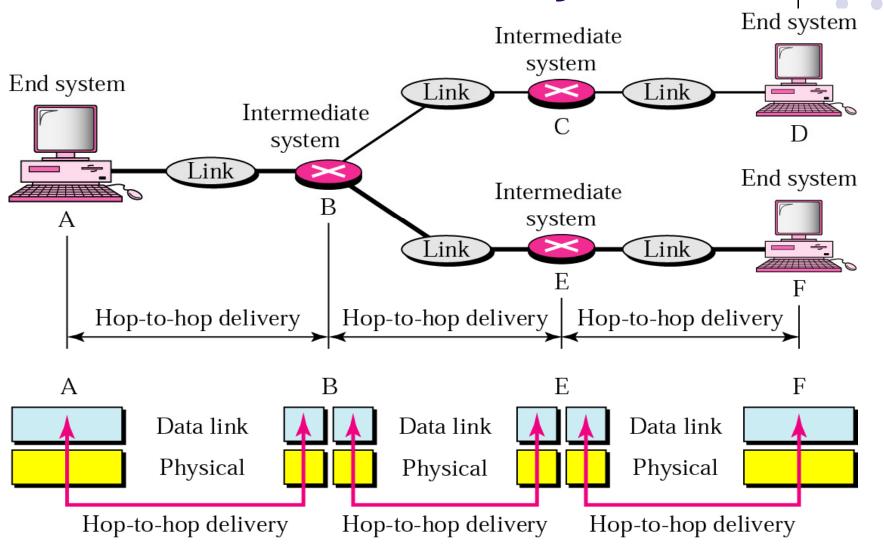




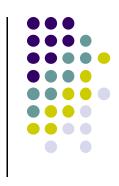


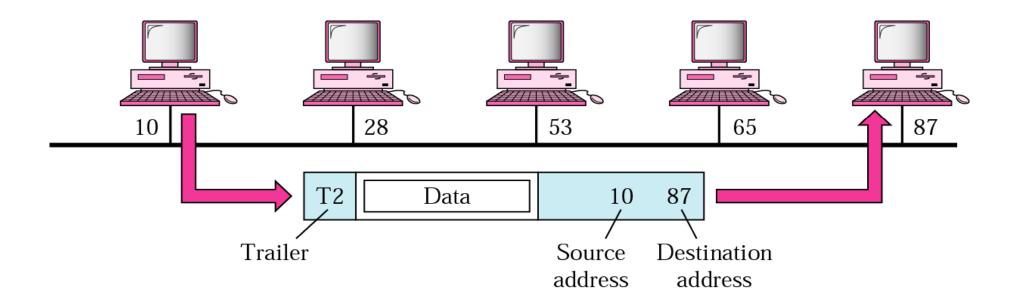
The data link layer is responsible for transmitting frames from one node to the next.

Node-to-Node Delivery

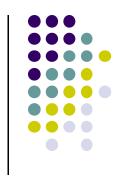


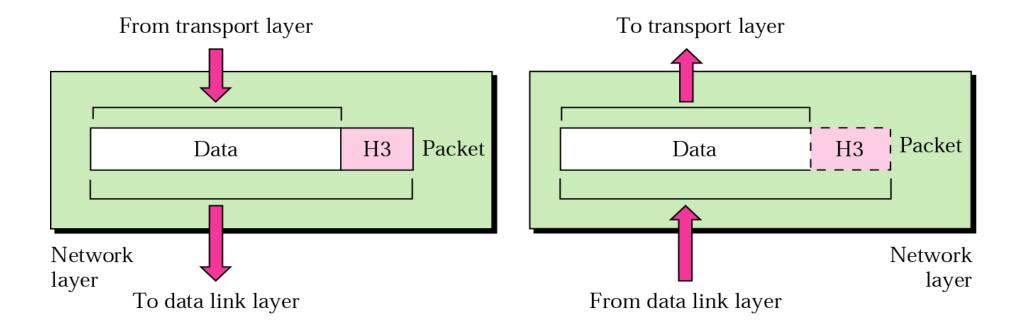
An Example





Network Layer



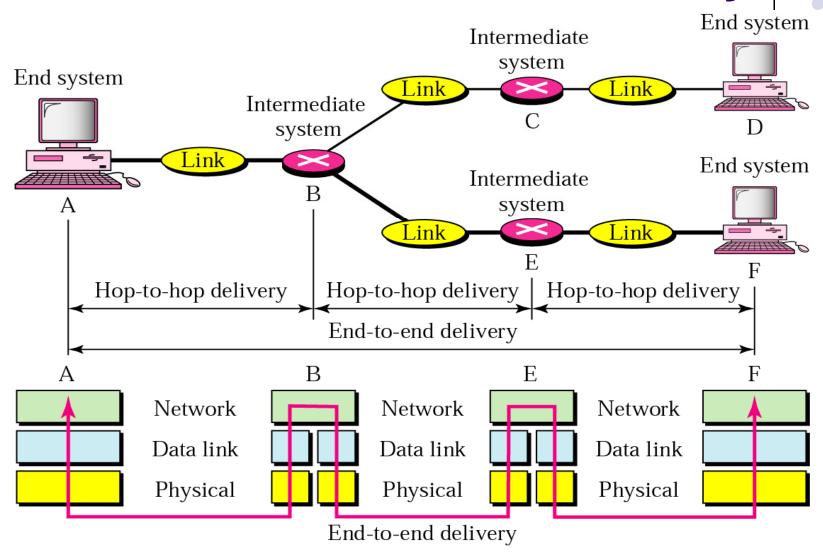




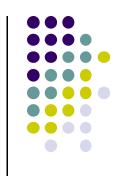


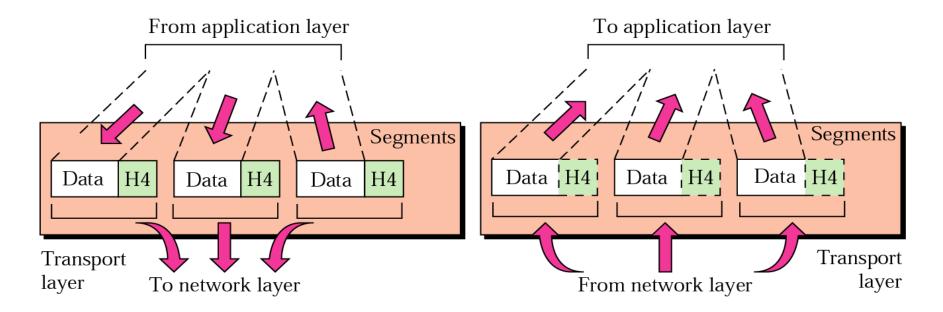
The network layer is responsible for the delivery of packets from the original source to the final destination.

Source to Destination Delivery









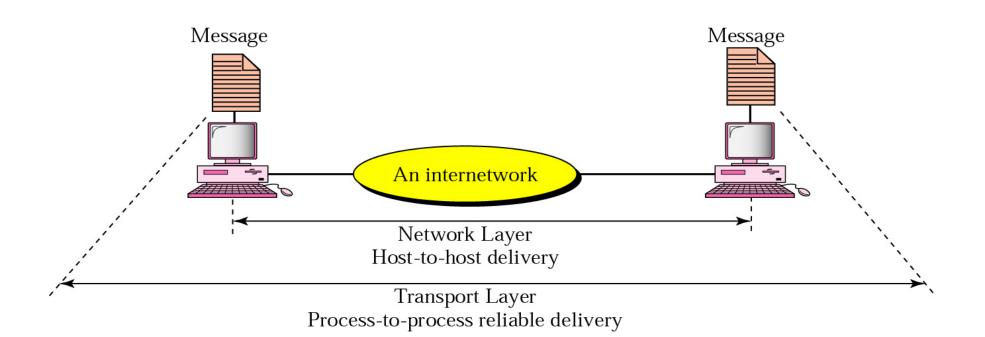




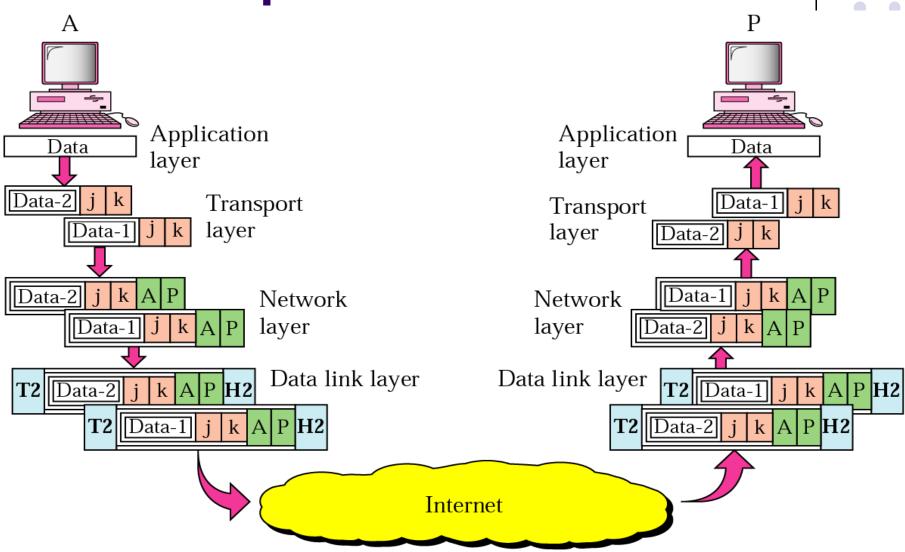
The transport layer is responsible for delivery of a message from one process to another.

Process to Process Delivery of Message



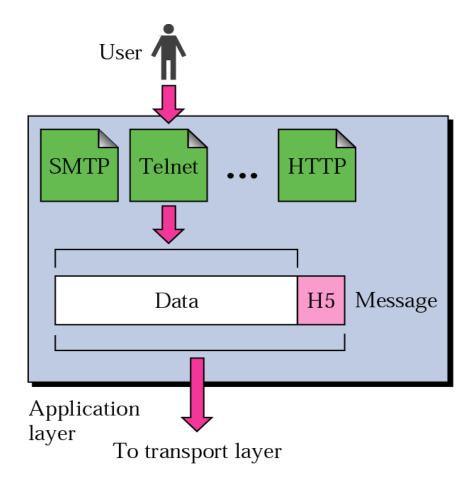


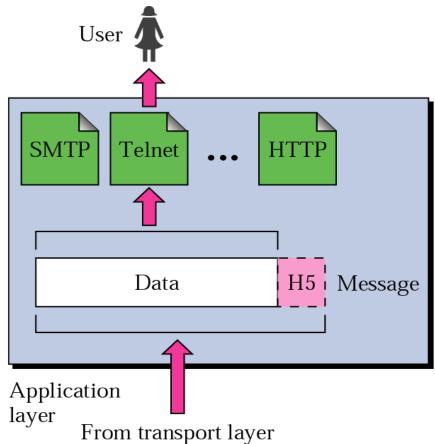
An Example



Application Layer











The application layer is responsible for providing services to the user.





To allow access to network Application To provide reliable process-toresources process message delivery and Transport To move packets from source error recovery to destination; to provide Network internetworking To organize bits into frames; Data link to provide hop-to-hop delivery To transmit bits over a medium: Physical to provide mechanical and electrical specifications





7	Application
6	Presentation
5	Session
4	Transport
3	Network
2	Data link
1	Physical