Internet Datagrams

The Millennial Telegraph

The Telegram

m No. 168.

THE WESTERN UNION TELEGRAPH COMPANY.

21,000 OFFICES IN AMERICA. CABLE SERVICE TO ALL THE WORLD.

This Company TRANSMITS and DELIVERS messages only on conditions imiting its liability, which have been assented to by the sender of the following mediators can be quarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty the message is filled with the Company for transmission.

This is an UNFEPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

ECEIVED at 143 East Bay Street, Charleston, S. G.

95. A. KN. J. 32 PAID. 4:04p.m.

Washington, D. C. October 17th 199

Mitchell & Smith,

Charleston, S. C

Arrived Charleston Sunday morning leave for Macon Sunday night important I have full conference with you early Sunday. Please send letter Charleston Hotel Stating hour and place can meet prefer your office,

Wright Brothers

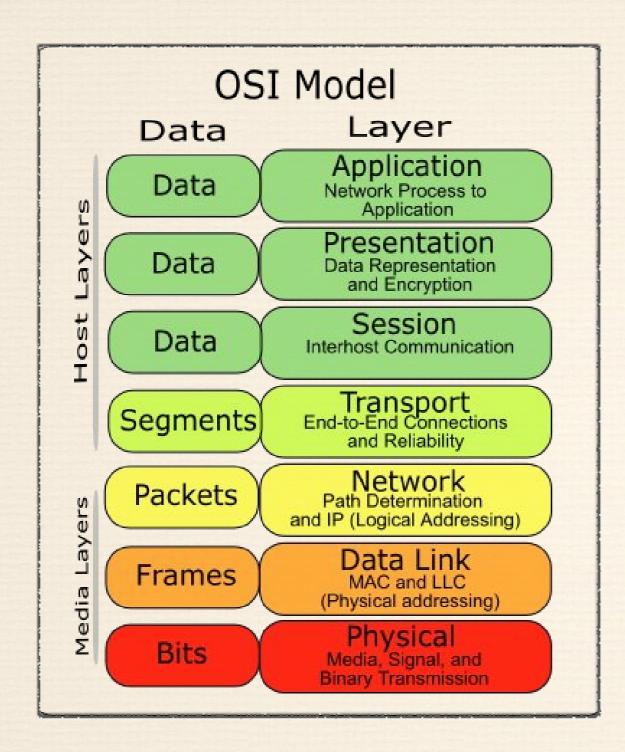
Orville Wright, Willer Wrigh

- . Self-contained
- . Conveys data
- . Independent
- . Ignorant of its medium

The Datagram

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"A self-contained, independent entity of data carrying sufficient information to be routed from the source to the destination computer without reliance on earlier exchanges between this source and destination computer and the transporting network."



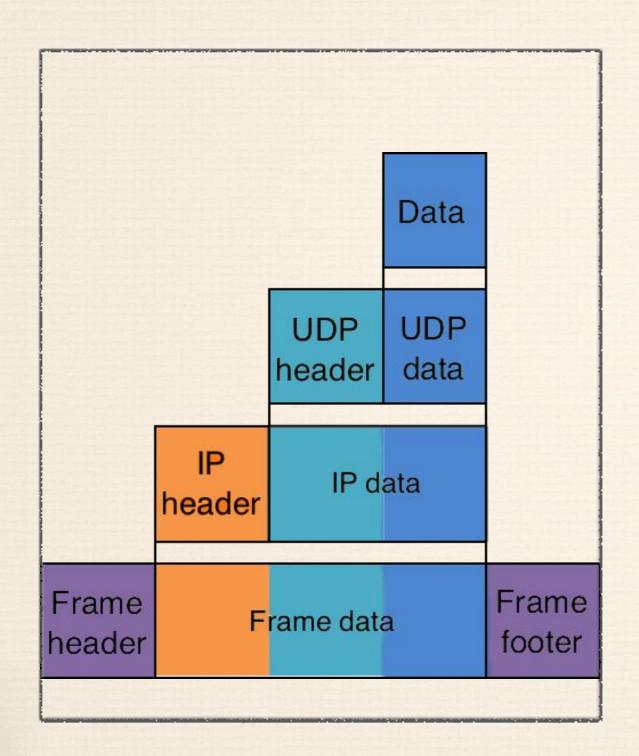
Application Layer

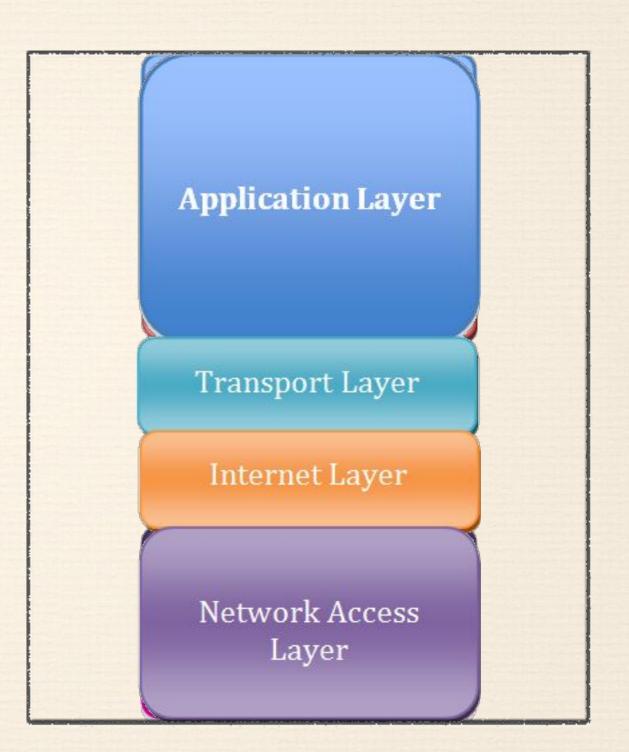
Transport Layer

Internet Layer

Network Access Layer

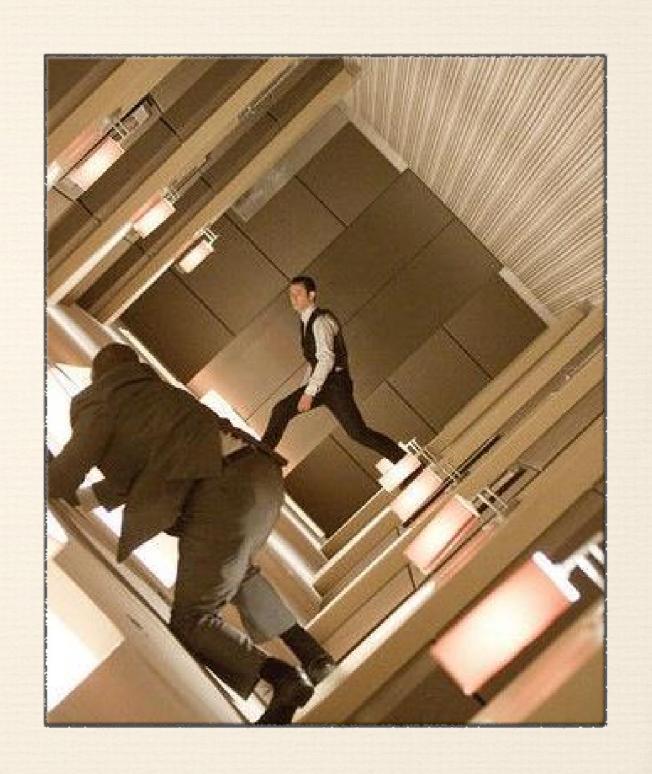
The TCP/IP Model





Handling Abstraction

- . Operate at your level
- Do what's necessary for one level down
- Be aware of the other levels



UDP

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- Thinnest possible layer atop Internet Protocol (IP)
- "Fire and forget" services like DNS, RIP, DHCP
- Streaming audio and video
- . Games

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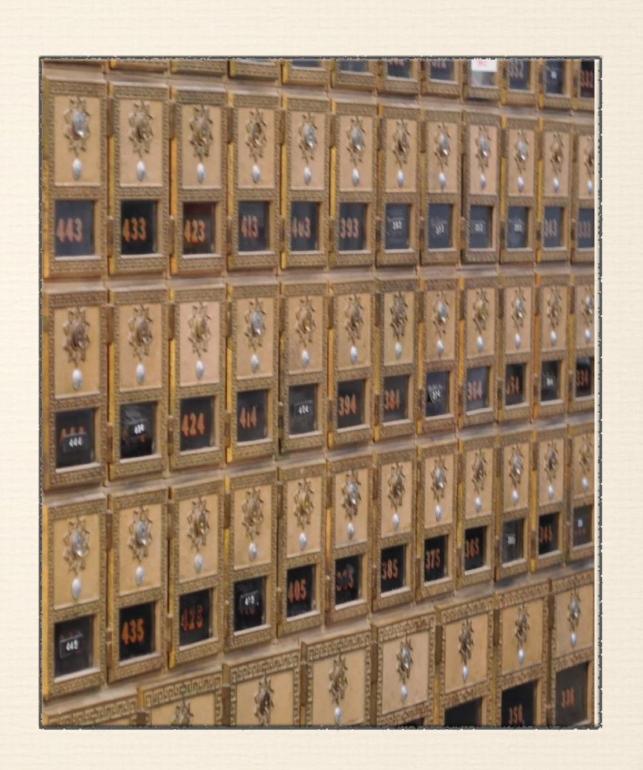
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Sockets and Ports

- A socket is a mailbox for datagrams
- A port is the ID number of a socket



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548

Maximum Packet Size?

Maximum Packet Size 1 4 6 6

Safest Packet Size

UDP Packets

- . Completely self-contained
- . Minimal overhead
- . Unreliable
- . Sockets & Ports
- . 1400 bytes should be safe, 548 bytes will be safe