Implementing TCP over UDP

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Clients

What do we know about the clients ?

Client 1

- Random packet drop

Client 2

- Less packets dropped
- Random ACK order

General implementation concepts

- One process by client

- SYN-SYNACK-ACK

General implementation concepts

Round Time Trip :
- Karn's algorithm

- 3 RTT's:
    - Measured

    - Smoothed
        $$RTTs = (1-t)*RTTs + t*RTTm$$

    - Deviated
        $$RTTd = (1-k)*RTTd + k*(RTTm-RTTs)$$

General implementation concepts

Congestion Window :

- No slow start

- Congestion avoidance

Perf and limits

Very random network saturation