«A new loss recovery algorithm for a stateless protocol»

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Transmission Control Protocol (TCP)

**Server State**
- local continuation state
- ssthresh
- CWND
- ...

**Client State**
- local continuation state
- RCV.NEXT
- RCV.WND
- ...

**Distributed connection state**
- end-to-end connection management
- reliable data transfer
- cross-platform implementation
Issues of the standard approach

- SYN attacks
- Problematic connection migration
- Limited amount of server resources
- New environments (e.g. clouds)
A Stateless Approach for Internet Transport Protocols


- Full management by the client of the entire process
- Less service segments interchange
- TCP segments are modified using standard procedure to carry Trickles parameters.
Proposed algorithm
Conclusion

a) The ability to work with multiple copies of the server at the same time

b) Protection against SYN attacks

c) Increase the number of clients which can be maintained by server
Thank you for your attention!