Dynamically Avoiding the Substantial Throughput Penalty of FRR

Abstract

Disclosed is a system for dynamically suppressing Fast Retransmission and Recovery (FRR) on high-latency Transport Control Protocol (TCP) connections with low ongoing packet loss. This system measures the relative rate of recent packet loss and adjusts the suppression of FRR based on the measured rate. Provided that the rate of actual packet loss is low, high-latency TCP connections can benefit significantly from suppressing FRR.

References

Dynamically Avoiding the Substantial Throughput Penalty of FRR

- V. Jacobson, Modified TCP Congestion Avoidance Algorithm, end2end internet mailing list.

Index Terms

Computer Science
Networks
Keywords
Latency  Bandwidth  Throughput  Round-Trip Latency  TCP  FRR  SACK