

# Fuzzy Logic Based Solution for the Congestion Collapse Problem

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## Abstract

Larger round trip time of a packet and its acknowledgement may expire the retransmission timeout timer. Packets not yet reaching their destinations are then thought as lost and retransmitted. As a result, the traffic with retransmitted packets increases and then round trip time also increases. The procedure is repeated. The Internet may become congested. In this paper, we propose a method based on the fuzzy theory to adapt retransmission timeout timer. Simulation results show our proposed scheme outperforms over the original TCP retransmission scheme.

Keyword : Congestion Collapse, Fuzzy Theory