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A SURVEY ON IMPROVEMENT IN TCP CONGESTION CONTROL BY CONTENTION DETECTION IN MANET

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Abstract

In MANET nodes have forward each others packet through the network without any fixed communication infrastructure. In wireless networks, improving TCP performance largely depends on congestion window size. Both contention and congestion affect the TCP performance. A contention problem occurs in network when adjacent nodes shared channel to transmit packets, Medium contentions cause network congestion because of a lack of coordination between the transport layer and the medium access layer. Due to the channel interference the Bandwidth Delay Product can't reach to it's maximum value as in wired network. Packet loss occurs at MAC layer due to congestion. So the idea is to dynamically adjust the congestion window to improve TCP performance. We studied congestion aware parameters like end to end delay, packet loss, Throughput and network overload.

Keywords : Congestion Control, Contention detection, Bandwidth delay product, Mobile Adhoc network, channel utilization