



TCP THROUGHPUT MODELING – A NEW APPROACH

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Abstract: TCP is the most dominant transport protocol that serves as a basis for many other protocols in wired and wireless networks. Interoperability with the TCP-dominant wireless or wired network is often critical to some ad hoc network applications using IEEE 802.11. TCP suffers from poor bandwidth utilization, and the utility of TCP in the multihop IEEE 802.11 network has been questioned. The signal interference in this environment, causes channel noise, delay and congestion in transmission which in turn affects the TCP performance. Then, to address these problems, propose two complementary mechanisms are proposed, that is, the TCP fractional window increment (FeW) scheme and the Route-failure nOtification using BULk-loS Trigger (ROBUST) policy. The TCP FeW scheme is a preventive solution used to reduce the congestion-driven wireless link loss. The ROBUST policy is a corrective solution that enables on-demand routing protocols to suppress overreactions induced by the aggressive TCP behavior.

Keywords: TCP Reno Scheme, multi hop technique, FeW scheme, ROBUST Policy

