The Transmission Control Protocol (TCP) was designed to provide reliable end-to-end delivery of data over unreliable networks. In practice, most TCP deployments have been carefully designed in the context of wired networks. Ignoring the properties of wireless Ad-hoc Networks can lead to TCP implementations with poor performance. In a wireless network, however, packet losses will occur more often due to unreliable wireless links than due to congestion. When using TCP over wireless links, each packet loss on the wireless link results in congestion control measures being invoked at the source. This causes severe performance degradation. If there is any packet loss in wireless networks, then the reason for that has to be found out and then only congestion control mechanism has to be applied. This work shows the performance of TCP with Adaptive Pacing (TCP-AP) and Link Random Early Discard (LRED) as queuing model over multihop transmission than the single hop transmission when the source and destination nodes are in mobile nature. The adaptive pacing technique seeks to improve spatial reuse. The LRED technique seeks to react earlier to link overload. This paper consists of simulated environment results under two different network scenarios.


Index Terms

Computer Science Networks

Key words

TCP Wireless Networks

Congestion Control

Adaptive Pacing

Link Random Early Discard