Abstract

In TCP/IP suite transport layer protocol Transmission Control Protocol (TCP) was initially used for secure connection-oriented host-to-host transmission of the packet over wired networks. When this TCP is implemented over wireless mobile networks environments, its leads to reduced throughput. It has been observed that when the wired TCP is apply in wireless environments, problems are not always due to network congestion state, but rather they are mostly because of high bit error rates, frequency of route failure, and topological network changes. Researchers have suggested a solution to inset a layer employment, a new layer between network and transport layer called ATCP (ad-hoc TCP). ATCP works over the sender node only and assuming that the sender node being always reachable: which is not always possible to meet in wireless mobile networks environments. Authors proposed an approach based on the local route request (LRREQ) packet, which is capable of mitigating ATCP, the assumption is that the sender node is always in the reachable state as well as intermediate link failure, which is also repaired with LRREQ mechanism.
References

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Index Terms

Computer Science Networks
Keywords

TCP; Wireless Networks; Congestion Control; Mobility; Mobile Ad-hoc.