Abstract

Transmission Control Protocol (TCP) is connection oriented transport protocol used on IP in wireless medium and it insists lossless data transmission in proper order. When TCP is used as a transmission protocol where physical layer is wireless medium, results high packet reordering due to bursty traffic and drastic variation in quality of service with respect to time. By sharing the same path for data and acknowledgement increases the traffic and collision, resulting in reduced throughput. In order to improve QoS this paper proposes a solution "Improved Delay the Duplicate Acknowledgement" (IDDA). This reduces traffic and spurious retransmissions, thereby improving TCP performance.

References

- Joerg Widmer, Robert Denda, and Martin Mauve, A Survey on TCP-Friendly Congestion
Acknowledgment

Time Delay Approach to Optimize TCP Performance in Hybrid Networked Systems

- J. Bennett, C. Partridge, and N. Shectman, “Packet Reordering is Not
- TCP PACKET CONTROL FOR WIRELESS NETWORKS, Wan Gang Zeng, THESIS SUBMITTED IN SIMON FRASER UNIVERSITY, August 24, 2006.
- Prasanthi. S., Sang-Hwa Chung and Won-Suk Kim, An Enhanced TCP Scheme for Distinguishing Non-congestion Losses from Packet Reordering over Wireless Mesh Networks 2011 IEEE.
Acknowledgment

Time Delay Approach to Optimize TCP Performance in Hybrid Networked Systems

Quanjie Qiu, Zhinhuo Li ans Zhongfu Wu "An Algorithm for Avilable Bandwidth Estimation of IPv6 Network" DOI:10. 1007/978-3-642-17313-4_41 In proceeding of: Advanced Data Mining and Applications-6th International Conference, ADMA 2010, Chongqing,China,November 19-21,2010,Preceediings,PartII Source:DBLP.


Index Terms

Computer Science Networks

Keywords

Transmission Control Protocol (TCP) Fast Retransmission Wireless Networks packet reordering

Random loss

congestion control