Abstract

Wireless LANs are one of the fastest growing wireless technologies. IEEE 802.11 is a standard for Wireless LANs. This doesn't provide Quality of Service (QoS) for multimedia applications. IEEE 802.11e enhances the QoS in Wireless LANs. It introduces the Access-Categories (AC) by using Enhanced Distributed Channel Access (EDCA). It is a MAC protocol supporting service differentiation through different ACs. EDCA offers different priorities for different traffics. Every station contains four transmission queues one for each AC. Every AC has its own channel access parameters such as AIFS (Arbitration interface spacing), CW (Contention window min and max) and TXOP (Transmission opportunity). In this paper performance of IEEE 802.11e EDCA is evaluated in Qualnet 7.3 through simulations.

References


3. Wireless medium access control (MAC) and physical layer (PHY) specification: Medium acces control (MAC) enhancements for quality of Service (QoS), IEEE Std. 802.11e/Draft 5.0 (2003).


Index Terms

Computer Science

Networks
Keywords

802.11e, QoS, Access categories, CW, TXOP, EDCA, AIFS