Abstract

MAC layer is key of wireless network. TDMA approach is based on Maximum utilization of frequency spectrum. Packet error is also depending on frequency spectrum. The demands of WLAN Devices day by day increases exponentially and it operates in the specific narrow spectrum of frequency bands and also increase communication parameters programmed and control over Most modern wireless devices. In this paper, simulate and analyze the performance of existing MAC layer protocol and hybrid MAC with TDMA protocol in wireless local Area Network is presented. In this simulation, we present a MAC protocol based on IEEE 802.11g standard in the DCF mode and DCF with TDMA mode which is useful to improve packet collision in traditional wireless networks. In this analysis, improved performance with TDMA base MAC layer is compared without TDMA. We used simulation through using NS-2 Simulator.
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Index Terms

- Computer Science
- Wireless

Keywords

- Distributed Coordinator Function (DCF)
- Medium access Control (MAC)
- Time Division Multiplexing Technique (TDMA)