

Title: Factors Influencing the Performance of Wireless Local Area Networks

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ABSTRACT

There has been a tremendous growth in the deployment of wireless local area networks (WLANs) in recent years. This growth is due to the flexibility, low-cost, simplicity, and user mobility offered by the technology. Such networks are being deployed widely in homes, offices, schools, hotels, factories, and almost anywhere that people live and work.

While there are many factors influencing the performance of WLANs, wireless access protocol has been found to have the most significant impact. This is because access protocol is the main element that determines the efficiency of sharing the limited wireless channel bandwidth. In this talk, the presenter will highlight the key factors influencing WLAN performance. Various methods for improving WLAN performance will be discussed. These methods include designing a better access protocol by modifying the existing ones, cross-layer design optimization, ways of reducing transmission overheads, and send more data under good channel conditions. Empirical results will be presented for better understanding of the concepts by the general audience.