Abstract

A favorable technique is using directional antennas for high-speed wireless personal area networks and local. A new MAC protocol for wireless ad hoc networks which is referred to as New deafness-aware MAC (NDA-MAC) is proposed in this paper. There are many directional MAC protocols which have been proposed, but have not broadly solved the problem of deafness. We are proposing NDA-MAC protocol which can differentiate the deafness problem from collisions by using control channels and logical data. So we are providing a discrete-time Markov chain model for analyzing the deafness impact for both DA-MAC and the current technique. By wide simulations we are showing our NDA-MAC protocol can expressively perform the other current techniques with respect to the duration of deafness, throughput, transmission fairness and energy consumption. Mainly Ad-hoc networks are suffering from hidden nodes (terminals) problem, leading to the problem of the nodes which are hidden (terminals), which indicates to Spartan degradation in network throughput. A survey of this which will give a basic idea of MAC protocols which will directly or indirectly indicate this problem. The mentioned protocols are set in various for giving the reader a detail understanding
for the growth made in types and are discussed in detail. To provide the reader a bottomless understanding for the progress done in enhancing the hidden node problem as well as a detailed comparison of various protocols are shown.

References


**Index Terms**

Computer Science  
Wireless

**Keywords**

Directional antenna