Throughput Improved -Adaptive CSMA MAC Protocol Design with Power Optimistic for MANET

Abstract:

Power conservation and throughput management is a major issue in Mobile Ad Hoc Networks. In the design of wireless ad hoc networks, various techniques are applied to efficiently allocate the scarce resources available for the communication links and the power control. Therefore the throughput management is not related to any particular layer in the layered design communication protocol design. But most of the power control and throughput management mechanisms are working in MAC layer. An adaptive CSMA medium access control (MAC) protocol is proposed to consider a spatial network model in which the nodes are randomly distributed in space, and address the problem of interference, power control, and throughput improvement through CSMA MAC layer design. Power control and throughput improvement is a critical issue to implement Mobile Ad Hoc networks. The proposed method presents a novel power control protocol, and improves the aggregate throughput of the network for its possible application in Mobile Ad Hoc networks.