

Abstract Details

Title: A Survey on MAC Protocols in MANET

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Abstract: Mobile ad hoc network is a wireless network without fixed base stations or any wire line backbone infrastructure. The nodes use peer-to-peer packet transmissions and multi hop routes to communicate with one another. The networks topology is continuously changing due to frequent node movements and hence dynamic routing protocols are required to establish and maintain the routes. The medium access control (MAC) protocol performs the challenging task of resolving contention amongst nodes while sharing the common wireless channel for transmitting packets. Traditional random channel access protocols that are used in wired networks, such as carrier sense multiple access (CSMA), are not very effective here. This paper provide a survey of MAC protocols developed for mobile ad hoc (MANETs) in the past based on certain methods and techniques such as multiple radios, multiple channels. The purpose of this article is to give the readers a general idea on the various techniques and methods used in literature to develop MAC protocols for MANETs.

Keywords: Medium Access Control (MAC), Mobile Ad hoc Networks (MANETs), CSMA, ALHO.