

Abstract

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"A Novel Forwarding/Dropping Decision Engine for Wireless Multi-hop Ad-hoc Networks"

Ad-hoc networks have been massively used in the last couple of years. The noticeable increase of wireless devices including PDAs, mobile phones, cellular devices, notebooks, etc has directed researchers to start considering various kinds of such ad-hoc networks including wireless mesh networks, multi-hop ad-hoc networks, etc. This paper introduces a new approach for the forwarding and dropping dilemma that faces every node participating in a MANET. The paper assumes that nodes in an ad hoc network behave as if they are in a competitive environment where each node seeks maximum delivery of its destined packets and minimum power consumption due to forwarding. The strategy makes use of data gathered from neighboring nodes that speaks about their behavior. It will eventually exclude selfish nodes and include cooperative nodes in accordance to the decision it makes.