Adaptive Threshold Counter Based Broadcast Scheme for Mobile Ad Hoc Networks in Route Discovery

Abstract:

In Mobile Ad hoc Networks (MANETs), the task of routing is distributed among network nodes which act as both end points and routers in a wireless multi-hop network environment. Broadcasting is an essential operation in MANETs routing protocol, where each node operations based on route discovery. The AODV protocol with a route discovery method based on Adaptive threshold counting method. The performance of the AODV routing protocol is analyzed fewer than 3 broadcasting schemes AODV with flooding, AODV with Counting, AODV with Adaptive counting. To discover a route to a specific destination node, existing on-demand routing protocols employ a broadcast scheme referred to as simple flooding whereby a route request packet (RREQ) originating from a source node is blindly disseminated to the rest of the network nodes. This can lead to excessive redundant retransmissions, causing high channel contention and packet collisions in the network, a phenomenon called a broadcast storm.