Abstract

Network topology can change quickly and unpredictably in mobile adhoc networks (MANETs), since there may exist a large number of independent ad hoc connections. All the routing protocols use a basic technique of route request transmission i.e. blind flooding which causes a lot of overheads in terms of end to end delay, packet delivery ratio, no. of routing packets generated etc. Because this is a bottleneck in performance of AODV protocol, an improved AODV protocol is proposed here. The proposed protocol is modeled, analyzed and implemented on base AODV routing protocol, based on improved method of route discovery and the proposed protocol adjusts itself dynamically based on the network density of MANET. The proposed protocol implementation is done in GloMoSim. The simulation results show that improved-AODV (I-AODV) protocol significantly reduces the no. of rebroadcasts and hence reduces the routing overheads caused due to broadcast storm in the network.

References

Modeling, Analysis & Implementation of Improved AODV Routing Protocol in MANETs


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