Abstract

Quality of Service is an indispensable parameter to evaluate the performance of any network, so research engrosseson valuing some important QoS parameters for mobile Adhoc network using AntHocNet routing algorithm. MATLAB software version R2011b is used for simulations due to its ease of node deployment and network set up. Simulation is done while varying the number of packets sent as 10, 30, 50, 70 and 90 in a network scenario. It is analyzed that AntHocNet provides excellent performance for fewer hops 1, 2 and 3 whereas for increased number of hops 9 and 10, it reveals from the routing metrics that use of AntHocNet is more advantageous over the other routing protocols like DSDV, AODV, DSR and TORA. The simulation enactment graphs shows better performance in terms of End-to-end delay, Delay jitter and superlative performance in terms of SINR with extended number of hops when the payload on the source node increases.

References
Multi Hop Routing in Wireless Mobile Networks using Ant Colony Optimization


Index Terms

Computer Science  Wireless

Keywords

AntHocNet  Mobile adhoc network  End-to-end delay  Delay Jitter  SINR