Abstract

A mobile adhoc network (MANET) is autonomous, self-organizing and self-configuring network with the capability of rapid deployment in response to application needs. Each host is equipped with a CSMA/CA (carrier sense multiple access with collision avoidance) transceiver. The mobile characteristic of mobile network creates the scenario of multihop, where the packets originated from the source host are relayed by several intermediate hosts before reaching the
destination. Routing is the process of finding a path from a source to destination among randomly distributed routers. In this paper hybrid routing protocol called Zone Routing Protocol (ZRP), Fisheye State Routing Protocol (FSR) and Ad Hoc On-Demand Distance-Vector Protocol (AODV) are examined. The comparative characteristic study and performance analysis is presented using performance metrics throughput, end-to-end delay packet delivery ratio is presented using network simulator Qualnet 5.0.2.

Reference

- IEEE, 1997, Wireless LAN Medium Access Control(MAC) and Physical layer PHY Specifications, IEEE Std. 802.11.
- Qualnet Simulator www.scalable-networks.com


Index Terms

Computer Science

Wireless

Key words

Adhoc networks

wireless networks

CBR, routing protocols

route discovery

simulation

performance evaluation

MAC, IEEE 802.11