Abstract

Mobile Ad-hoc networks (MANETs) composed of a group of mobile wireless nodes which while forwarding data packets to each of the other node, form a network independently of centralized administration. This paper addresses energy conservation which is a very important factor in Energy Constraint Mobile ad-hoc Networks (MANETs) and also try to reduce routing overhead for efficient functioning of the network. Every protocol give different results depending upon the application. There are different protocols for handling the routing in the mobile environment. This paper will focus on three well known protocol: Ad hoc On-Demand Distance Vector, Optimized Link State Routing Protocol, and Dynamic MANET on Demand protocol. The implementation of AODV, OLSR and DYMO routing protocol and their comparison based on the performance metrics: Throughput and End-to-End delay is
carried out using NS-2 (Network Simulator version -2) simulator. With the help of NS-2 (Network Simulator -2) AODV protocol provides a flexible and effective routing in any environments, an improved protocol PWAODV based on piggyback mechanism and weighted neighbor stability for low energy and packet delivery ratio is implemented. [1][11]

References

- Thomas Heide Clausen, Gitte Hansen, Lars Christensen GerdBehrmann, "The Optimized Link State Routing Protocol Evaluation through Experiments and Simulation"; Mindpass Center for Distributed Systems Aalborg University, Fredrik BajersVej 7E, DK-9220 Aalborg, Denmark, March ,2006
- C. Perkins , "Ad hoc On-Demand Distance Vector (AODV) Routing"; Nokia Research Center ,E. Belding-Royer,University of California, Santa Barbara,S. Das ,University of Cincinnati.,

Index Terms

Computer Science

Wireless
**Keywords**

Mobile Ad-hoc Network (manet)  Ad-hoc On-demand Distance Vector (aodv)  Optimized Link State Routing Protocol (olsr)

Dynamic Manet On Demand Protocol (dymo)

Piggyback And Weighted Neighbor Stability Algorithm –aodv (pwaodv).