Abstract

In wireless communication, using ad-hoc networking any user desiring to communicate with each other can form a temporary network, without any form of centralized administration. Each node participating in the network is mobile and can be connected dynamically in an arbitrary manner. All nodes of these networks behave as routers and take part in discovery and maintenance of routes to other nodes in the network. Because nodes are forwarding packets for each other, some sort of routing protocol is necessary to make the routing decisions. Routing in the MANETs is a challenging task and has received a tremendous amount of attention from researches. This has led to development of many different routing protocols for
MANETs, and each author of each proposed protocol argues that the strategy proposed provides an improvement over a number of different strategies considered in the literature for a given network scenario. In the recent years, it has been quite difficult to determine which protocols may perform best under different network scenarios, such as change in node density and traffic applications. This paper begins with an overview of classification of routing protocols. We then provide a performance comparison of throughput for three mobile ad-hoc routing protocols AODV, DSR and OLSR to understand and analyze the behavior of these protocols under different parameters. All the experimental set up and simulations is done using OPNET v14.5 Simulator.

References
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**Index Terms**

Computer Science  Networking

**Keywords**

Routing Protocol  Manet  Aodv  Dsr  Olsr  Opnet  Ftp Traffic  Multimedia  Video  Conferencing Traffic