Abstract

Recent years have witnessed an extreme growth in research and development in the field of Wireless Networks. The special focus has been on Ad-hoc Networks especially Mobile Ad-hoc Network (MANET). Mobile ad-hoc network is a dynamic instant multihop radio infrastructure-less temporary network of wireless mobile nodes in which each participating nodes act as host and router at the same time. Routing is a crucial activity and plays an important role in the success of the communication in these structures. Many routing protocols have been presented for Mobile Ad-hoc network since last decade. The major difference between these protocols lies in the mechanism of searching, maintenance and recovering the route path. In the recent researches, there are numerous MANET routing protocols aiming to find the most suitable path from source to destination. In this paper, a simulation based comparative analysis is performed on various types of routing protocols over MANET. Ad Hoc On-Demand Distance Vector (AODV), Dynamic Source Routing (DSR), Temporally-Ordered Routing Algorithm (TORA), Optimized Link State Routing (OLSR) and Geographic Routing Protocol (GRP) has been considered for investigation in this paper based on throughput, delay, load and data dropped performance metrics using OPNET Modeler.
Comparative Analysis of AODV, DSR, GRP, OLSR and TORA by varying number of nodes with FTP and HTTP Applications over MANETs


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Index Terms

Computer Science Wireless

Keywords

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