Abstract

Mobile Ad hoc Networks (MANETs) is a combination of wireless mobile nodes that exchanges information and dynamically form a network of self-configuring and self-organizing without any fixed infrastructure or centralized administration. MANETs is very important in the researches of the military and civilian applications. Routing is a major part in the success of any communication between these mobile nodes, therefore routing protocols play an important role in finding an efficient and reliable route between mobile nodes from source to destination. This paper focuses on the performance analysis of these well-known routing protocols named DSR, AODV and OLSR and it evaluates the performance based on the rate of file transfer protocol (FTP) with (medium load) traffic and varying the number of nodes in two different scenarios to assess the performance of each protocol and determine the best. In this work, the performance comparison between the AODV, DSR and OLSR routing protocol in terms of data dropped, end to end delay, throughput and routing overhead have been performed by using OPNET version 17.5 simulator. The simulation results showed that OLSR protocol is mainly more suitable for large dense networks.
References


Index Terms

Computer Science

Networks

Keywords

MANETs, AODV, DSR, OLSR, FTP, OPNET.