Abstract

A Mobile Ad-Hoc Network (MANET) is a collection of wireless mobile nodes that communicates with each other without using any existing infrastructure, access point or centralized controller. In MANET, as nodes moves in and out of the network, the topology of the network changes frequently and thus, routing becomes a challenging task. A variety of routing protocols with varying network conditions are analyzed to find an optimized path from a source to destination. In this article a performance comparison of four popular mobile ad-hoc network routing protocols i.e. Ad hoc On-demand Distance Vector (AODV), Dynamic Source Routing (DSR), Optimization Link State Routing (OLSR) and Zone Routing Protocol (ZRP) is presented with variable pause time. A network simulator QualNet 6.1 from scalable networks is used to evaluate the performance of these protocols. The performance analysis is based on different
network metrics such as Average End to End delay (s), Average Jitter(s), Throughput and Packet delivery ratio.

References


Index Terms

Computer Science  Wireless
Keywords
MANET  AODV  DSR  OLSR  ZRP  QualNet 6.1