A Survey on Performance Evaluation of Non-Realistic Mobility Models with Different Routing Protocols on MANET

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Abstract

We are moving from the traditional wired communications to wireless communications. Wireless network consists of several nodes which communicate without any wired channel. MANET (Mobile adhoc network) is one of the types of wireless network. Mobile means moving, infrastructure less and network means communication between nodes. So, “Mobile adhoc networks” are a kind of Dynamic network in which nodes are moving without any centralized structure. Selection of routing protocol and mobility model in Mobile adhoc network is a challenging task due to its dynamic changes in topologies. We discuss in this paper non-realistic mobility models and various routing protocols of adhoc networks. The objective of this review paper, is to determine the performance measures like throughput, packet Packet delay, Routing overhead, effect of speed, no. of packets transmitted, lost, bytes and bit rate of MANET’s Routing Dynamic Source Routing (DSR), Ad-hoc On Demand Distance Vector (AODV) and Temporally Ordered Routing Algorithm (TORA) with respect to time / number of nodes. This detailed simulation results illustrate the importance evaluating and implementing routing protocols environment and this also help to researchers in deciding which mobility model
is better under which condition.

References


Index Terms

Computer Science

Wireless
Keywords

Mobility Models; MANET; Simulation Tools; Routing Protocols; wireless network;