Abstract

The performance of a protocol in MANETs can be measured using some parameters, which also includes simulation environment like campus or military. This research is done in the campus environment using the simulation parameters such as area size, packet size, time of simulation, UDP connection…etc for measuring the performance matrices such as sent, received and dropped rate of CBR data packets, average end-to-end delay, packet delivery ratio, normalized routing overhead and average throughput in order to evaluate the performance of OLSR routing protocol using different mobility models, namely, Random-Based Mobility Model (RBMM) and Random WayPoint Mobility Model (RWMM) in MANET by using NS-2.35 simulator. NS-2.35 is an open source simulation software and the simulation of this research include eight scenarios dependent on mobility model based on the number of nodes such as 40, 60, 80 and 100 mobile nodes and then using AWK, Xgraph and Trace_graph for analyzing data and showing graph. Based on obtained results the performance of OLSR by using RWPMM is more efficient as compared to the performance of OLSR under RBMM, because maximum parameters gave better result with RWPMM as compared to with RBMM.
References

Index Terms

Computer Science

Networks

Keywords

MANETs, OLSR, Multi Point Relays (MPR), Mobility Models, RWPMM, RBMM.