Random WayPoint Mobility Model based Performance Estimation of MANET in terms of Average End to End Delay, Jitter and Throughput for CBR Application

Abstract

In this paper, we are configuring an Adhoc mode scenario using QualNet as a Simulation tool to study impact of Random Waypoint mobility on QoS issues in MANET like Average end-to-end delay, jitter and throughput by varying number of nodes within a subnet. Different sets of reading were taken for six cases with varying number of nodes from 7 to 100 using CBR traffic type. We found that Random WayPoint Mobility Model works well with MANETs of large number of nodes as well, as the highest throughput is recorded for sixth case with 100 number of nodes. We conclude that Random WayPoint model with CBR traffic gives maximum throughput.

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Index Terms

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Keywords
MANET mobility Random WayPoint model Ad hoc scenario simulation QualNet CBR.