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Authors:

V. Vasanthi

Hemalatha. M

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Abstract

The mobility model used emulates closely the real-life Scenarios. The mobility model dictates the movement of nodes and plays an important role in determining the protocol and connectivity of these nodes. We describe several mobility models that represent mobile nodes whose movements are independent of each other (i. e. Entity mobility models) and several mobility models that represent mobile nodes whose movements are dependent on each other (i. e. Group mobility models) and several mobility models that represent mobile nodes whose movement in pre-defined path with the assumption of obstacles in the simulation terrain (i. e. Geographic Restriction models). The goal of this paper is to present a number of mobility

models in order to offer researchers more well-versed choices when they are deciding on a mobility model to use in their performance evaluations. We incorporate more realistic mobility model that includes entity models (Manhattan model and Gauss-Markov model) and group mobility model (Reference Point Group Model) and Random Waypoint mobility model and Geographic Restriction model (Mission Critical Model). The random way point is used as a default mobility model in many network simulations. Our comparative analysis of the mobility models that are existing, are discussed on a variety of simulation settings and parameters like Packet Delivery Ratio (PDR), Average End to End Delay (ED), Control Overhead (CO), Generated packets (GP), Dropped Packets (DP) and Received packets (RP).

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Index Terms

Computer Science

Networks

Keywords

Performance Ns-2 Bonn Motion Dsr Mhn Gm Rpgm Mcm Rwp

