Abstract

Handover algorithms based on different performance metric are used to provide seamless handover and need to be evaluated in terms of unnecessary handover and missing handovers. Wrong decision probability (WDP) is one such performance metric used to measure the efficiency of handover algorithms and is measured based on Unnecessary handover probability (UHP) and Missing handover probability (MHP) for handover evaluation. In this work handover probability (HP), UHP, MHP and WDP are computed for a five node network model. The handoff algorithm for the five node network model is designed based on combination of Received signal strength (RSS) and Bandwidth (BW), and is evaluated using Wrong Decision Probability model considering the four states of mobile node, namely Cooperative state, failed state, selfish state and malicious state. Analytical and simulation results are presented to validate the vertical handover. Results are compared with the results of single state five node network model.
BW and SS based Handover Analysis of Four States of Mobile Node in a Five Node Network Model


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