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.


Sudipta Patowary, Nityananda Sarma and Siddhartha Sankar Satapathy "SINR based Vertical Handoff Algorithm between GPRS and Wi-Fi Networks," Special Issue of IJICT, Vol. 1 Issue 2, 3, 4; for International Conference [ACCTA-2010], 3-5 August 2010.


S. Akhila and Suthikshn Kumar, "Analysis of Handover Algorithms based on Wrong Decision Probability Model," International Journal of Wireless Networks and

**Index Terms**

Computer Science  
Networks

**Keywords**

- Missing handover probability (MHP)
- Unnecessary handover probability (UHP)
- Wrong decision probability (WDP)
- Bandwidth (BW)
- Received Signal strength (RSS)