THE VERTICAL HANDOFF ALGORITHM USING FUZZY DECISION IN CELLULAR PHONE NETWORKS

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Abstract

A new, dynamic, cost effective and efficient Handoff algorithm is the need of the future world of Wireless Communication. The simple Fuzzy decisions can be used to design an effective and efficient Handoff algorithm. Few selected parameters such as Power Level, Cost, and Bandwidth along with the Speed of the Mobile Terminal (MT) are considered here for the design of the Handoff algorithm. The Membership Functions for each of the parameter are determined and corresponding Membership Degrees are evaluated from their concerned Membership Functions. The optimized fuzzification of the parameters is carried out by developing the appropriate weight vector. The simulation results presented elaborates the performance of the algorithm in comparison to the simple RSS and Thresholded RSS algorithm.