Proactive low loss traffic mechanism during proxy MIPv6 handover over WLAN

ABSTRACT

A PMIPv6 supports mobile node (MN) mobility management in a localized domain over the wireless local area network (WLAN). The standard PMIPv6 mobility related signalling are adopted in reactive mode, which results in long services disruption and unavoidable data traffic loss, thus, harmfully affects the MN's communication performance. In this article, we propose a proactive low loss traffic mechanism, which introduces an efficient buffering technique with optimized functions to prevent data traffic loss and save their transmission cost, without any extra signalling or modification on the standard PMIPv6 mobility signalling structures. Through ns-2 simulation, experiment evaluations and numerical results were accomplished to verify the proposed mechanism superior performance.