Mobility and handover technique in heterogeneous wireless networks

ABSTRACT

The management techniques for Mobile IPv6 between different wireless technologies are very important to complete the handover process with the least possible delay. In the fast handover, when a mobile node moves to another network, it needs to do handover operations. These operations have a severe impact on the handover latency. This paper proposes an Enhanced Advanced Duplicate Address Detection (EA-DAD) method in a heterogeneous mobile environment with the support of the MIH services. The proposed method quickly provides a unique Ipv6 address for MNs. At the same time, the binding updates to home agent and correspondent node are to be performed from old access router. We can see through results that by optimizing network layer, EA-DAD quickly presents unique Ipv6 addresses for MNs with a minimum handover latency and packet loss even at high speed movements.

Keyword: Vertical handover; FMIPv6; MIH; Duplicate address detection