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A framework of a route optimization scheme for nested mobile network

(Conference Paper)

Senan, S.^a ✉, Hashim, A.A.^a ✉, Zeki, A.M.^b ✉, Saeed, R.A.^a ✉, Hameed, S.A.^a ✉, Daoud, J.I.^a ✉

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Abstract

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Network mobility technology is now being accomplished with the foundation of NEMO (NETwork MObility), developed by Internet Engineering Task Force (IETF). Although, it achieves optimal and continuous communication, it still suffers from some limitations, especially when the level of nesting increases. To overcome these drawbacks, this paper will present a route optimization framework for nested mobile network using hierarchical structure with Binding Update Tree (BUT). This framework should reduce packet overhead, handoff latency, packet transmission delay, and achieve optimal routing. At last, a comparison will be done with bi-directional tunneling used by NEMO Basic Support to evaluate the performance of the proposed framework. © 2012 Springer-Verlag.

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