

On the Design of Micro-mobility for Mobile Network

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Abstract

The micro-mobility issue has been discussed in host mobility in the past decade while the network mobility has become increasingly popular recently. Hence we believe that developing a micro-mobility scheme for mobile network is important and a micro-mobility scheme called Micro-NEMO is proposed in this work. The Micro-NEMO can provide local movement within an administrative domain for a moving network and be compatible with NEMO basic support protocol since it is extended from HMIPv6. Furthermore, we develop an enhanced Micro-NEMO to solve the pinball routing problem. The simulation results indicate that Micro-NEMO and its enhanced scheme can achieve a better performance than other mobility schemes in terms of number of binding update, average handoff latency, end to end delay and packet overhead.

Key words : Mobile Network;Network Mobility;Mobility

Management;Micro-mobility; Mobile Router;HMIPv6