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Qos-aware handover scheme using context transfer with link layer trigger for hierarchical mobile IP

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The accelerated growth of the Internet has driven various networks to converge into a fully unified IP based architecture. The challenge in such a complex network is to provide a seamless support, as basic protocols for mobile computing technologies were designed without assuming mobility of the network nodes. Different strategies have been proposed to support QoS in wireless networks, although they lack key elements to support mobility with effective QoS support. This paper describes a QoS aware handover scheme based on the Hierarchical Mobile IPv6 architecture. Here enhancements to the scheme to improve seamless support were investigated. The two main elements added to the scheme are the use of link layer trigger and also context transfer. Simulation results show that the performance for the average handover delay has increased by approximately 76% for the proposed scheme.