

Integrated Multi-layer Registration Combining SIP with Mobile IP Schemes

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Abstract

Mobile communications will be the major applications of next-generation Internet. The users may access the mobile services using handheld devices anywhere and anytime. Therefore, mobility management will play a significant role in providing mobile multimedia services. Both MIP and SIP have been proposed to solve the IP mobility issues. For the multimedia application such as VoIP, SIP has been studied and widely deployed recently. To process various data with both MIP and SIP protocols, it is necessary to design an efficient multi-layer registration scheme for mobility management and multimedia services. In this paper, we propose an integrated scheme to improve the registration efficiency for mobile nodes carrying out both MIP and SIP protocols. The number of registration message as well as the registration delay will be reduced by using the proposed integrated multi-layer registration scheme.

Key words : Mobile IP;SIP;Mobility management;Multi-layer registration