Mobility Management in a SIP Environment
Requirements, Functions, and Issues

draft-itsumo-sip-mobility-req-00.txt

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Motivation

- Mobility is rapidly becoming a rule/norm rather than exception.
- SIP is gaining acceptance as the signaling protocol of multimedia and Internet telephony.

It is essential to support mobile users in a SIP signaling and control environment.

Objectives

- Describe the framework requirements for mobility management in general, as well as the mobility management functions and requirements in particular.
- Identify open issues involved in supporting mobile users in a SIP environment (See the draft for details).
- Include the relevant issues in the agenda of the SIP WG and other appropriate WGs in the IETF

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Framework Requirements

Mobility management scheme of wireless IP networks should

- support personal as well as terminal mobility,
- support global roaming,
- be wireless “technology-independent”,
- support real-time and non-real time applications,
- support current TCP-base applications transparently, and
- interworks with today’s 1G/2G telephony smoothly.

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Mobility Management Functions and Requirements

Functions	Requirements
Hand-off	• Should support cell, subnet (intra-domain) and domain hand-off. • Should utilize the soft hand-off feature of CDMA technology. • Should be wireless “technology independent”.
Registration	• Should be completed in less than a few seconds.
Configuration	• Should be done in fractions of a second.
Address Binding	• Should allow a user to maintain a universal identifier regardless of its point of attachment to the network.
Location Management	• Should be up to date, accurate, and confidential.

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Summary and Conclusions

- We believe mobility will be the norm, and the signaling and control protocol of Internet should be able to support mobile users.
- Identified the functions and requirements for supporting mobile users as well as open issues.
- Looking forward to addressing them in the SIP WG or other appropriate WGs in the IETF.