

Special Issue on
Mobility Management for Flat Networks

Until recently, complexity in mobility management did not pose any serious challenges with respect to performance for the vast majority of mobile devices. Most devices had no active sessions most of the time, and only a small minority maintained a handful of sessions active for short periods. This changed with the wider introduction of modern smartphones which use network resources in a much more aggressive manner and for longer durations, have built-in multiaccess capabilities, and suitable user interfaces for rich user experiences, especially in terms of multimedia services. The latter is conducive to dramatically increasing traffic volumes. Within this landscape, session and mobility management in today's infrastructure networks is falling far behind the new requirements arising from the widespread use of sophisticated end-user devices. In order to address the core problem, mobility management needs to include in its scope multiaccess and multipath management. In current network architectures it is typical that a (logical) single network element is in charge of managing mobility. This impedes routing functionality as all data traffic has to be forwarded to this network element, thus reducing system scalability and overall reliability. Considering the current trend in "flattening" network architectures, new means of supporting mobility can be envisaged in a more distributed and dynamic fashion. Such considerations include end-hosts and network schemes.

We invite authors to submit papers reporting original, previously unpublished research which address this research area and follow either evolutionary approaches based on current IP-centered architectures or introduce revolutionary designs and new paradigms. Experimental/testbed and empirical studies as well as implementation/industry results (including field trials) are also welcome. Topics of particular interest include:

- Performance evaluation, including scalability analysis, energy efficiency, and resource utilization in flat networks
- End-host vs. network mobility management
- Future Internet architectures for flat networks, including cloud networking and mobile clouds
- Flat and distributed mobility management in 3.9/4G networks, including 3GPP, IEEE and IETF technologies and standards
- Disruptive technologies for flat mobile networks
- Mobility and multiaccess management in flat networks
- Mobile data traffic measurement and analysis, modeling, and prediction
- Security, trust, and reliability for flat networks
- Experimental platforms for flat networks

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Schedule

Manuscript submission deadline: 15 February 2012

End of first review cycle: 15 May 2012

Submission of revised paper: 15 August 2012

Notification of acceptance: 15 November 2012

Submission of final revised paper: 15 January 2013

On-line publication of special issue: 3rd Quarter 2013 (Tentative)

Hard copy publication of special issue: Depends on printing schedule

Paper Submission

Authors should follow the Journal of Telecommunication Systems manuscript format described at the journal web site: www.springer.com/journal/11235. In particular, perspective authors should thoroughly follow the "Instructions for Authors". Submission of a manuscript implies: that the work described has not been published before; that it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities –tacitly or explicitly– at the institute where the work has been carried out. The publisher will not be held legally responsible should there be any claims for compensation.

Manuscript Style

There is no limit on the length of submitted papers. Submitted papers are typically 35 double-spaced typewritten pages, including all figures, tables, bibliographies, etc. See "Instructions for Authors" on the journal web site for details on Title Page, Abstract, Keywords, Citation style, Table and Artwork formatting.

How to Submit

Manuscripts must be submitted by email to all three Guest Editors in PDF format (with Subject: "[Telecommun Syst] Mobility Management for Flat Networks"). The submission email must include the title and abstract of your paper, 1-3 special issue topics of primary interest as listed above, and the names, affiliations and emails of *all* authors. The corresponding author should also be designated clearly.

If a paper contains material previously presented at a conference, or some other Journal/Proceedings, authors are REQUIRED to cite the previous work. Electronic copies of the earlier publication(s) should be provided as part of the submission. In addition, authors are requested to explain in a cover letter to the Guest Editors, in which way the new submission provides substantial novel contributions beyond those of the previously published work.

All submitted papers will be peer-reviewed by at least three independent reviewers, including a Guest Editor, to ensure high quality and relevance to the topics of the Special Issue.