

Call for Papers Special Issue on Reliable Network-based Services (RNS)

Scope

In the today's provision of network services, a rapid development of many new technologies (like virtualization or cloud computing) and applications (e.g., social networking) can be seen. They have a considerable engineering, commercial and societal impact and pose numerous challenges to designers. One class of issues is the continuous offering of services in spite of various types of failures that are everyday events in networks. The increasing complexity, the participation of many different autonomous entities in the service provision, the lack of information, coordinated actions as well as governance makes this challenge increasingly difficult. In addition to a design of reliable network segments, server clusters etc., new technological issues like stability and failure management across heterogeneous autonomous systems arise. They also involve novel fields at the border of technology, business and society, like risk-awareness or influence of public policy.

The goal of this issue is to present state of the art research contributions that focus on the reliable network-based services (RNS) provisioning. Contributions are invited from prospective authors with interests in the indicated special issue topics and related areas of application. All contributions should be of high quality, original, unpublished, and not submitted for publication elsewhere. Topics of interest include, but are not limited to:

- Network and service resilience:
 - reliability requirements and metrics for individual users, business, and the society
 - service differentiation based on recovery methods
 - dependability of networked applications and network-based services
 - application and service-specific survivability techniques
- Commercial and societal context:
 - telecommunication networks as an element of critical national infrastructures
 - network resilience combined with economics and business issues
 - risk and reliability in the Internet and enterprise networks
- Operational aspects:
 - resilience of multi-domain connections in the Internet
 - reliability of emerging technologies (e.g., network virtualization, thin client architectures)
 - network dependability in cloud computing
 - interaction between fault management and traffic handling
- Theory and modeling
 - reliability analysis
 - methods and theory for survivable networks and systems
 - simulation techniques for network and service resilience

Schedule

Manuscript submission deadline: December 1, 2011

First notification: March 1, 2012

Submission of revised paper: May 1, 2012

Notification of acceptance: July 1, 2012

Guest Editors

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Instructions for submission

The submission website for this journal is located at <http://ees.elsevier.com/comcom>. To ensure that all manuscripts are correctly identified for inclusion into the Special Issue, the authors have to select "**Special Issue: RNS**" when they reach the "Article Type" step in the submission process.