

CALL FOR PAPERS

Special Issue of *International Journal of Network Management* on **Mathematical Methods in Network Management**

PUBLICATION DATE: **May 2008**

The construction of next generation systems for the management of networks and services depends on underlying quantitative methods and algorithms. Operations such as network topology discovery and root cause analysis in alarm data incorporate mathematical methods and algorithms. Studies, however, frequently emphasize architectures, systems aspects, and software modeling rather than the quantitative methods and conceptual models underlying them. Some new mathematical methods with potential applicability to the domain have emerged, but not yet found their way into research on-and industrial network management systems. The focus of this issue is twofold. First, we consider the decomposition of state-of-the-art methods from current literature, FCAPS (fault-management, configuration, accounting, performance, and security) and contemporary policy management systems. Secondly, we seek out the application of new methods relative to this standard set. Contributions should be of an applied nature, but purely theoretical works in the proper domain context are welcome as well. Datasets employed in analysis can be synthetic provided suitable justification and documentation are provided for them. This special issue of *International Journal of Network Management* is seeking new and unpublished contributions on mathematical methods in network management including, but not limited to the following areas and sub-areas:

Algorithms
Automated Reasoning
Bayesian Networks
Data Mining Algorithms
Decision Processes, Decision Trees
Dynamic Programming
Evolutionary Algorithms (GA, GP, EP, etc.)
Formal Calculi
Game Theory
Graph Theory
Integral transforms
Machine Learning with SVMs, ANNs, etc.

Mathematical Programming
Matrix Decomposition
Network Flow Programming
Optimization
Queue Management
Queuing Theory, Queuing Systems, Queue Management
Statistical Methods (parametric, non-parametric)
Stochastic Models and Optimization
System Dynamics
Time-Series Models
Topology

IMPORTANT DATES

Deadline for abstract registration:	Dec 20, 2007
Notification of abstract acceptance:	2 weeks after registration
Deadline for submissions:	Jan 28, 2008
Notification of acceptance:	Feb 18, 2008
Revised papers to editors due date:	March 3, 2008
Final camera-ready to Wiley:	April 7, 2008
Publication Date:	May 27, 2008

SUBMISSION GUIDELINES

Electronic submission, in LaTeX via EDAS or the corresponding guest editor (submission link and email address given below) is required. The format of the paper should be single column, with font size 10 and 1.5 spacing in no more than 14 pages in length including figures and tables.

Dr. Michael Alexander (corresponding guest editor)
Lecturer, Dept. of Information Systems
Wirtschaftsuniversität Wien
Augasse 2-6, A-1090 Vienna, Austria
Email: malexand@wu-wien.ac.at

Prof. Mark Burgess (guest editor)
Professor, Faculty of Engineering
University College Oslo
Postboks 4 St Olavs Plass, N-0130 Oslo, Norway
Email: mark@iu.hio.no

Further information on the journal, including author guidelines, are available at the journal homepage:

<http://www.interscience.wiley.com/journal/networkmanagement>