





SPECIAL ISSUE ON GREEN NETWORKING & COMPUTING

INTERNATIONAL JOURNAL OF BUSINESS DATA COMMUNICATIONS AND NETWORKING (IJBDCN)

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SUBMISSION DUE DATE: September 30, 2012

INTRODUCTION:

The topic "Green networking" attracts growing attention due to economical, energetic and environmental reasons. The amount of power consumed by ICT which is rapidly increasing, as well as the energy bill of service providers contributes to the economical reasons. According to a number of studies, ICT alone is responsible for a percentage which varies from 2% to 10% of the world power consumption, due to the ever increasing diffusion of electronic devices. Communication networks, including the Internet and wireless networks, represent a non negligible part of the energy consumption of ICT. In addition, the carbon footprint of ICT devices due to energy consumption and the activities related to their entire lifecycle contribute to global warming.

OBJECTIVE OF THE SPECIAL ISSUE:

In the last few years, energy saving techniques are being considered for communication networks with new generation devices and network management approaches exploiting algorithms and protocols for adapting the network to the varying traffic load. The Special Issue on "Green Networking and Computing" aims to serve as a platform for researchers and visionaries from academia, research labs, and industry from all over the world working on the above concepts. Sharing ideas, views, results, and experiences in the field of green, wired and wireless networking is what "Green Networking and Computing" Special issue intends to be about. Anything from theoretical and experimental achievements, to innovative design and management approaches, prototyping efforts, and case studies is of interest.

RECOMMENDED TOPICS:

Topics of interest include, but are not limited to the following:

- Power consumption models of networking infrastructure
- Power measurements and data from empirical studies of communication networks
- Techniques for reducing power consumption in data centers
- Hardware and architectural support for reducing power consumption
- Energy efficient network management
- Green network design
- Applications of green networking technologies and principles
- Cross-layer optimizations for reducing energy consumption
- Optimization of energy consumption in optical networks
- Energy-efficient protocols and protocol extensions
- Energy-efficient transmission technologies
- Energy-efficient peer-to-peer networking and overlays
- Energy-efficient cloud computing
- Green wireless access networks
- Green wired access network

- Green future Internet
- Energy cost models for network operators
- Energy-efficient sensor networks
- Renewable energy sources for wired and wireless access networks

INFORMATION'S ABOUT SPECIAL ISSUE:

This Special Issue is organized in cooperation with the IEEE ComSoc Technical Subcommittee on Green Communications and Computing (<u>TSCGCC</u>). In addition, Special Issue is organized in conjunction with:

- the <u>3rd Symposium on "Green Networking and Computing"</u>, which will be held in the frame of the 20th International Conference on Software, Telecommunications and Computer Networks (<u>SoftCOM 2012</u>) in Split, Croatia, September 11-13, 2012.
- the International Workshop on Algorithms and Concepts for Networked Sensing Systems Powered by Energy Harvesters (EnHaNSS'12) which will be held in conjunction with the International Conference on Networked Sensing Systems (INSS'12) in Antwerp, Belgium, June 11-14, 2012.

Selected papers from these two conferences will be invited to submit their extended versions to the Special Issue.

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme issue on "Green networking and computing" on or before September 30, 2012. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE JOURNAL'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://www.igi-global.com/Files/AuthorEditor/guidelinessubmission.pdf. All submitted papers will be reviewed on a double-blind, peer review basis. Papers must follow APA style for reference citations.

After registration on the on-line submission system, authors can submit their manuscript at the following web site: http://www.igi-global.com/authorseditors/titlesubmission/newproject.aspx by selecting:

- 1. Journal: "International Journal of Business Data Communications and Networking";
- 2. Submission Type: "Special Issue Manuscript"
- 3. Select Special Issue: "Green Networking and Computing".

Important Dates

Paper Submission:

Notification:

Final Submission:

Tentative Publication date:

November 15, 2012

January 15, 2013

March 15, 2013

3rd Quarter 2013

All submissions should be directed to the attention of:

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ABOUT INTERNATIONAL JOURNAL OF BUSINESS DATA COMMUNICATIONS AND NETWORKING (IJBDCN):

The mission of the International Journal of Business Data Communications and Networking (IJBDCN) is to disseminate practical and theoretical information, which will enable readers to understand, manage, use, and maintain business data communication networks more effectively. IJDBCN addresses key technology, management, and policy issues for utilizing data communications and networking in business and the current best practices for aligning this important technology with the strategic goals of the organization. This journal is an official publication of the Information Resources Management Association www.igi-global.com/IJBDCN. Journal is indexed in different databases including SCOPUS and Compendex:

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