

Special Issue on "Green Cloud Computing"

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Guest Editors: Bernabe Dorronsoro, Dzmitry Kliazovich, Pascal Bouvry, Albert Zomaya

Editor-in-Chief: Peter Kacsuk

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Cloud computing is nowadays very popular and extended among Internet users. It provides a wide variety of services, from high performance computing to storage or web services. Behind the cloud, there are huge datacenters that are usually composed by a large variety of computing, storage, and networking devices, among others, that boost their power consumption. Energy consumption does not only concern the increasing cost of operating these centers, but it also implies an important environmental impact.

Optimizing energy consumption in datacenters is therefore of high importance not only for companies, but for governments too. There are several ways that may lead to a reduction of the energy consumption in datacenters. An efficient utilization of available resources is obviously one of them, but not the only one. Research on novel more efficient cooling systems, new computing and network architectures, and storage systems is needed for the next generation green datacenters. In addition, the design of highly efficient software and services is a must for the green cloud. This special issue focusses on novel solutions that contribute to the reduction of energy consumption in the cloud.

Scope of Special Issue

- Green ICT
- Green data centers and cloud networking
- · Energy-efficient networking
- Energy-efficient protocols and algorithms
- · Energy-efficient computing
- Energy-efficient data management
- Energy-efficient services
- Energy-efficient resource allocation
- Energy-aware schedule
- Efficient virtualization and consolidation

Important Dates

Full Paper Regular Submission Due: November 30, 2014 (extended)

Notification of Results: March 15, 2015
Revisions Due: April 15, 2015
Notifications of Final Acceptance: May 15, 2015

Submissions of Final Revised Papers: June 15, 2015 Expected Publication Date: Early 2016

Submission

This special issue invites original research papers that present novel ideas in the field. Submitted articles must not have been previously published or currently submitted for publication elsewhere. Papers should be submitted directly to the Journal of Grid Computing at https://www.editorialmanager.com/grid/. When submitting your paper, please be sure to choose the "Green Cloud Computing" special issue.

For additional information, please contact Bernabe Dorronsoro (bernabe.dorronsoro diaz@inria.fr).

Editor-in-Chief

Peter Kacsuk, Laboratory of Parallel and Distributed Systems, Hungarian Academy of Sciences

Guest Editors

Bernabe Dorronsoro, University of Luxembourg, Luxembourg (Corresponding Editor)
Dzmitry Kliazovich, University of Luxembourg, Luxembourg
Pascal Bouvry, University of Luxembourg, Luxembourg
Albert Zomaya, University of Sydney, Australia