Call for Papers Annals of Operations Research Special Volume: ROADEF/EURO challenge 2012 on Machine Reassignment Problems

Application migration and machine reassignment are key issues in modern management of enterprise data centers. The ROADEF/EURO challenge 2012, devoted to this important topic, focused on a machine reassignment problem proposed by Google.

The aim of this challenge was to improve the usage of a set of machines. A machine has several resources as for example RAM and CPU, and runs processes that consume these resources. Initially each process is assigned to a machine. In order to improve machine usage, processes can be moved from one machine to another. Possible moves are limited by hard constraints, as for example resource capacity constraints, and have a cost. A solution to this problem is a new process-machine assignment that satisfies all hard constraints and minimizes a composite cost involving load, balance and move costs. More details can be found on the subject at http://challenge.roadef.org/2012/en/

We invite papers for a special issue of *Annals of Operations Research* on the machine reassignment problem. All participants to the ROADEF/EURO challenge 2012 are invited to submit a paper. Papers addressing optimization methods for closely related problems are welcome as well.

Instructions for authors can be found at:

http://www.springer.com/business/operations+research/journal/10479

Please see the Author Instructions on the web site if you have not yet submitted a paper through Springer's web-based system, *Editorial Manager*. Be sure to note in the Manuscript Comment box that your work is intended for the special volume and to select the article type "S.I. : Machine Reassignment Problem".

Papers will be subject to a strict review process managed by the Guest Editors and accepted papers will be published online individually, before print publication. The deadline for submission is December 1, 2013.

We look forward to receiving your paper.

Guest editors: Murat Afsar, Christian Artigues, Eric Bourreau, Emmanuel Guere, and Safia Kedad-Sidhoum