Breakout local search for the quadratic assignment problem

Submitted by Jin-Kao Hao on Mon, 01/26/2015 - 09:47

Titre	Breakout local search for the quadratic assignment problem
Type de publication	Article de revue
Auteur	Benlic, Una [1], Hao, Jin-Kao [2]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2013
Langue	Anglais
Date	Jan-01-2013
Numéro	9
Pagination	4800–4815
Volume	219
Titre de la revue	Applied Mathematics and Computation
ISSN	0096-3003
Mots-clés	adaptive diversification [3], breakout local search [4], landscape analysis. [5], quadratic assignment [6]
Résumé en anglais	The quadratic assignment problem (QAP) is one of the most studied combinatorial optimization problems with various practical applications. In this paper, we present breakout local search (BLS) for solving QAP. BLS explores the search space by a joint use of local search and adaptive perturbation strategies. Experimental evaluations on the set of QAPLIB benchmark instances show that the proposed approach is able to attain current best-known results for all but two instances with an average computing time of less than 4.5 hours. Comparisons are also provided to show the competitiveness of the proposed approach with respect to the best-performing QAP algorithms from the literature.
URL de la notice	http://okina.univ-angers.fr/publications/ua7051 [7]
DOI	10.1016/j.amc.2012.10.106 [8]
Lien vers le document	http://dx.doi.org/10.1016/j.amc.2012.10.106 [8]
Titre abrégé	Applied Mathematics and Computation

Liens

[1] http://okina.univ-angers.fr/publications?f[author]=7482
[2] http://okina.univ-angers.fr/jinkao.hao/publications
[3] http://okina.univ-angers.fr/publications?f[keyword]=10889
[4] http://okina.univ-angers.fr/publications?f[keyword]=10888
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Publié sur *Okina* (http://okina.univ-angers.fr)