



## List-graph colouring for multiple depot vehicle scheduling

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Résumé en anglais	This article addresses a multiple depot vehicle scheduling problem (MDVSP) arising in public transportation. The general problem consists in assigning vehicles to trips while minimising the number of scheduled vehicles and the operational costs. The MDVSP considered here takes into account heterogeneous types of vehicles with complex relations among them. This special feature matches well situations encountered in practice, but makes the problem particularly difficult. We introduce a new formulation based on list-graph colouring, from which an iterative tabu search is developed for vehicle minimisation. The approach is assessed on seven real-world benchmarks and yields highly satisfactory results in terms of solution quality and computation time.
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