

## Grid Computing for Multi-Objective Optimization Problems

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**Abstract :** Solving multi-objective discrete optimization applications has always been limited by the resources of one machine: By computing power or by memory, most often both. To speed up the calculations, the grid computing represents a primary solution for the treatment of these applications through the parallelization of these resolution methods. In this work, we are interested in the study of some methods for solving multiple objective integer linear programming problem based on Branch-and-Bound and the study of grid computing technology. This study allowed us to propose an implementation of the method of Abbas and Al on the grid by reducing the execution time. To enhance our contribution, the main results are presented.

**Keywords :** multi-objective optimization, integer linear programming, grid computing, parallel computing

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