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A Genetic Algorithm for the Uncapacitated Network Design Problem

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Chapter

Abstract

In this paper a genetic algorithm (GA) for solving the uncapacitated network design problem (UNDP) is presented. The problem with single source and destinations for each commodity is considered. UNDP is a base in class of the network design problems, but it is still NP-hard. The implementation of GA is additionally improved by caching technique of GA. The computational results on instances up to 50 commodities, 100 nodes and 700 edges are reported.

Keywords

Genetic Algorithm Transportation Cost Steiner Tree Lagrangean Relaxation Steiner Tree Problem
These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves.

Preview

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