

Modeling and Solving the Mixed Capacitated General Routing Problem.txt
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Abstract. We tackle the Mixed Capacitated General Routing Problem (MCGRP) which generalizes many other routing problems. Very few papers have been devoted to this argument, in spite of interesting real-world applications. We propose an integer programming model for the MCGRP and extend to its polyhedron inequalities valid for the Capacitated Arc Routing Problem (CARP) polyhedron.

Identification procedures for these inequalities and for some relaxed constraints are also discussed in this paper. Finally, we describe a branch and cut algorithm including the identification procedures and present extensive computational experiments over instances derived from the undirected CARP and the mixed CARP

Keywords. Routing Problem, Mixed Graph, Relaxations, Separation Algorithms