Abstract

This thesis considers Maximum Flow Network Interdiction Problem (MFNIP), which is to minimize the maximum flow from node ‘s’ to node ‘t’ by interdicting the arcs with limited resources available in the capacitated directed network. We consider the case in which there are uncertainties in the amount of resources needed to attack the arcs. To solve the problem, we propose an algorithm using Combinatorial Benders’ Cuts. We report computational experiences using the algorithm on some grid networks.