Parametric Uncapacitated Facility Location Problem

차 동 완* · 정 기 호**

* 한국과학기술원 경영과학과
** 경성대학교 경영학과

ABSTRACT :

We consider the parametric uncapacitated facility location problem(UFLP) where the demand of each customer is allowed to vary over a certain interval. Despite the value of parametric optimization techniques in practical applications, only recently devoted is the research attention on parametric integer programming. Although several researchers have developed techniques for parametric analysis on a (mixed) integer programming, there still reported few results which perform parametric analysis for large scale real life problems. This seems to be due to the fact that parametric analysis usually requires the computation of a number of integer programming problems with heavy computational burden. In this paper, we will show that the special structure of UFLP provides the nice property of its parametric version, based on which an efficient branch and bound procedure for parametric analysis is developed.