论文

A CUTTING PLANE METHOD FOR LINEAR BILEVEL PROGRAMS

WU Shiquan(1),CHEN Yang(2),Patrice Marcotte(3)

(1)Institute of APPlied Mathematics, Academia Sinica, Beijing 100080, China;(2)North Telecom, Baseline Street, Ottawa, Canada;(3)Centre de Recherche sac ies fonSPorts, Universite de Montreal, Quebdc, Canada

收稿日期   修回日期   网络版发布日期   接受日期

摘要   In this papert a cutting planelnethod is presented for solving the linear BLPP. An optimality criterion for the linear BLPP is derived from two related linear programs constructed by using the complementarity conditions for the second level problem. Two types of cutting planes are developed in order to deal with different situations and to obtaina maximal efficiency. The method makes use of the special cuts and the implicit vertex enumeration idea to avoid some drawbacks in some existing cuttillg plane methods. The algorithm can be proved to be finitely convergent.

关键词   Linear bilevel programming, convex polyh

分类号

Abstract In this papert a cutting planelnethod is presented for solving the linear BLPP. An optimality criterion for the linear BLPP is derived from two related linear programs constructed by using the complementarity conditions for the second level problem. Two types of cutting planes are developed in order to deal with different situations and to obtaina maximal efficiency. The method makes use of the special cuts and the implicit vertex enumeration idea to avoid some drawbacks in some existing cuttillg plane methods. The algorithm can be proved to be finitely convergent.

Key words   Linear bilevel programming   convex polyhedron   vertex enumeration   cutting plane method   global opti

DOI:

通讯作者

扩展功能

本文信息

- Supporting info
- PDF(0KB)
- [HTML全文](0KB)
- 参考文献

服务与反馈

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- 复制索引
- Email Alert
- 文章反馈
- 浏览反馈信息

相关信息

- 本刊中 包含"Linear bilevel programming, convex polyh"的相关文章

本文作者相关文章

- WU Shiquan
- CHEN Yang
- Patrice Marcotte