A Branch-and-Price Algorithm for the Scheduling of Customer Visits in the Context of Multi-Period Service Territory Design

Matthias Bender, Jörg Kalcsics, Stefan Nickel, Martin Pouls

PII: S0377-2217(18)30083-3
DOI: 10.1016/j.ejor.2018.01.047
Reference: EOR 14948

To appear in: *European Journal of Operational Research*

Received date: 2 February 2017
Revised date: 24 January 2018
Accepted date: 25 January 2018

Please cite this article as: Matthias Bender, Jörg Kalcsics, Stefan Nickel, Martin Pouls, A Branch-and-Price Algorithm for the Scheduling of Customer Visits in the Context of Multi-Period Service Territory Design, *European Journal of Operational Research* (2018), doi: 10.1016/j.ejor.2018.01.047

Highlights

- A scheduling problem in the context of multi-period territory design is studied.
- A novel, exact branch-and-price algorithm is proposed.
- Specially-tailored acceleration and symmetry reduction techniques are developed.
- Individual algorithmic features are evaluated on real-world data sets.
- The results show that the proposed algorithm is very effective.