

# Optimizing Safety Stock Placement in General Network Supply Chains

Stephen C. Graves, and Ekaterina Lesnaia

MIT

*Abstract*—In the paper, we minimize the holding cost of the safety stock held in a supply chain modeled as a general network. By our assumption, the demand is bounded by a concave function. This fact allows us to formulate the problem as a deterministic optimization. We minimize a concave function over a discrete polyhedron. The main goal of the paper is to describe an algorithm to solve the problem without assuming any particular structure of the underlying supply chain. The algorithm is a branch and bound algorithm.

[Full Text Not Available]