

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910136251603321 |
| Autore | Deroussi Laurent |
| Titolo | Metaheuristics for logistics . Volume 4 // Laurent Deroussi |
| Pubbl/distr/stampa | London, England ; ; Hoboken, New Jersey : , : iSTE : , : Wiley, , 2016 ©2016 |
| ISBN | 1-119-13666-0 1-119-13659-8 |
| Edizione | [1st edition] |
| Descrizione fisica | 1 online resource (177 p.) |
| Collana | Computer Engineering Series |
| Disciplina | 388.310285 |
| Soggetti | Transportation problems (Programming) Mathematical optimization |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Table of Contents; Title; Copyright; Introduction; PART 1: Basic Notions; 1 Introductory Problems; 1.1. The "swing states" problem; 1.2. Adel and his camels; 1.3. Sauron's forges; 2 A Review of Logistic Problems; 2.1. Some history; 2.2. Some polynomial problems; 2.3. Packing problems; 2.4. Routing problems; 2.5. Production scheduling problems; 2.6. Lot-sizing problems; 2.7. Facility location problems; 2.8. Conclusion; 3 An Introduction to Metaheuristics; 3.1. Optimization problems; 3.2. Metaheuristics: basic notions; 3.3. Individual-based metaheuristics; 3.4. Population-based metaheuristics 3.5. Conclusion4 A First Implementation of Metaheuristics; 4.1. Representing a list of objects; 4.2. The implementation of a local search; 4.3. The implementation of individual-based metaheuristics; 4.14. Conclusion; PART 2: Advanced Notions; 5 The Traveling Salesman Problem; 5.1. Representing a solution: the two-level tree structure; 5.2. Constructing initial solutions; 5.3. Neighborhood systems; 5.4. Some results; 5.5. Conclusion; 6 The Flow-Shop Problem; 6.1. Representation and assessment of a solution; 6.2. Construction of the initial solution; 6.3. Neighborhood systems; 6.4. Results 6.5. Conclusion7 Some Elements for Other Logistic Problems; 7.1. Direct representation versus indirect representation; 7.2. Conditioning problems; 7.3. Lot-sizing problems; 7.4. Localization problems; 7.5. |

Conclusion; PART 3: Evolutions and Current Trends; 8 Supply Chain Management; 8.1. Introduction to supply chain management; 8.2. Horizontal synchronization of the supply chain; 8.3. Vertical synchronization of a supply chain; 8.4. An integral approach of the supply chain; 8.5. Conclusion; 9 Hybridization and Coupling Using Metaheuristics
9.1. Metaheuristics for the optimization of the supply chain9.2. Hybridization of optimization methods; 9.3. Coupling of optimization methods and performance evaluations; 9.4. Conclusion; 10 Flexible Manufacturing Systems; 10.1. Introduction to the FMS challenges; 10.2. The job-shop problem with transport; 10.3. Proposal for a metaheuristic/simulation coupling; 10.4. Workshop layout problem; 10.5. Conclusion; 11 Synchronization Problems Based on Vehicle Routings; 11.1. Inventory routing problem; 11.2. The location-routing problem; 11.3. Conclusion; 12 Solution to Problems
12.1. The swing state problem12.2. Adel and his camels; 12.3. The forges of Sauron; Conclusion; Bibliography; Index; End User License Agreement

Sommario/riassunto

This book describes the main classical combinatorial problems that can be encountered when designing a logistics network or driving a supply chain. It shows how these problems can be tackled by metaheuristics, both separately and using an integrated approach. A huge number of techniques, from the simplest to the most advanced ones, are given for helping the reader to implement efficient solutions that meet its needs. A lot of books have been written about metaheuristics (methods for solving hard optimization problems) and supply chain management (the field in which we find a huge number of combinatorial optimization problems) in the last decades. So, the main reason of this book is to describe how these methods can be implemented for this class of problems.

| | |
|-------------------------|--|
| 2. Record Nr. | UNISA996279545503316 |
| Titolo | 2013 7th Asia Modelling Symposium : AMS 2013 Hong Kong, 23-25 July 2013 // David Al-Dabass, editor |
| Pubbl/distr/stampa | Piscataway, NJ : , : IEEE, , 2013 |
| ISBN | 0-7695-5101-7 |
| Descrizione fisica | 1 online resource (xxx, 318 pages) : illustrations (some color) |
| Disciplina | 003.3 |
| Soggetti | Computer simulation Model-integrated computing Simulation methods |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Includes index. |