Record Nr. UNINA9910141513503321 Autore Lorca Xavier **Titolo** Tree-based graph partitioning constraint [[electronic resource] /] / Xavier Lorca Pubbl/distr/stampa London, : ISTE Hoboken, N.J., : Wiley, 2011 **ISBN** 1-118-60430-X 1-299-14154-4 1-118-60447-4 1-118-60360-5 Descrizione fisica 1 online resource (252 p.) Collana **ISTE** Classificazione MAT029000 Disciplina 005.1/16 005.116 Soggetti Constraint programming (Computer science) Graph theory Electronic books. 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. pt. 1. Constraint programming and foundations of graph theory -- pt. Nota di contenuto 2. Characterization of tree-based graph partitioning constraints -- pt. 3. Implementation: task planning -- pt. 4. Conclusion and future work. Combinatorial problems based on graph partitioning enable us to Sommario/riassunto mathematically represent and model many practical applications. Mission planning and the routing problems occurring in logistics perfectly illustrate two such examples. Nevertheless, these problems are not based on the same partitioning pattern: generally, patterns like cycles, paths, or trees are distinguished. Moreover, the practical applications are often not limited to theoretical problems like the Hamiltonian path problem, or K-node disjoint path problems. Indeed,

they usually combine the graph partitioning problem with sever