Record Nr. UNINA9910483942303321 **Titolo** Constraint handling rules: current research topics // Tom Schrijvers, Thom Fruhwirth (editors) Pubbl/distr/stampa Berlin; ; Heidelberg:,: Springer,, [2008] ©2008 3-540-92243-1 **ISBN** Edizione [1st ed. 2008.] Descrizione fisica 1 online resource (VII, 245 p.) Collana Lecture notes in computer science. Lecture notes in artificial intelligence;;5388 005.11 Disciplina Soggetti Constraint programming (Computer science) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Includes bibliographical references and index. Nota di bibliografia Welcome to Constraint Handling Rules -- A Flexible Search Framework Nota di contenuto for CHR -- Adaptive CHR Meets CHR??? -- Constructing Rule-Based Solvers for Intentionally-Defined Constraints -- Implementing Probabilistic Abductive Logic Programming with Constraint Handling Rules -- A Compositional Semantics for CHR with Propagation Rules --CHR for Imperative Host Languages -- Guard Reasoning in the Refined Operational Semantics of CHR. Sommario/riassunto The Constraint Handling Rules (CHR) language is a declarative concurrent committed-choice constraint logic programming language consisting of guarded rules that transform multisets of relations called constraints until no more change occurs. The CHR language saw the light more than 15 years ago. Since then, it has become a major declarative specification and implementation language for constraintbased algorithms and applications. In recent years, five workshops on constraint handling rules have spurred the exchange of ideas within the CHR community, which has led to increased international collaboration, new theoretical results and optimized implementations. The aim of this volume was to attract high-quality research papers on these recent advances in Constraint Handling Rules. The 7 papers presented together with an introductory paper on CHR cover topics on search, applications, theory, and implementation of CHR.