Record Nr. UNINA9910299059903321 Handbook on Agent-Oriented Design Processes / / edited by Massimo **Titolo** Cossentino, Vincent Hilaire, Ambra Molesini, Valeria Seidita Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2014 **ISBN** 3-642-39975-4 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (568 p.) 004 Disciplina 005.1 006.3 Software engineering Soggetti Artificial intelligence Software Engineering Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- The IEEE-FIPA Standard on Design Process Document Template -- ADELFE 2.0 -- The ASPECS process -- ELDAMeth Design Process -- The Gaia Methodology Process -- GORMAS: A methodological guideline for Organizational-Oriented Open MAS --INGENIAS with the Unified Development Process -- The O-MASE Methodology -- PASSI - Process for Agents Society Specification and Implementation -- ROMAS methodology -- INGENIAS-Scrum -- The SODA Methodology -- The Tropos Software Engineering Methodology -- The Open Up Process. Sommario/riassunto To deal with the flexible architectures and evolving functionalities of complex modern systems, the agent metaphor and agent-based computing are often the most appropriate software design approach. As a result, a broad range of special-purpose design processes has been developed in the last several years to tackle the challenges of these specific application domains. In this context, in early 2012 the IEEE-FIPA Design Process Documentation Template SC0097B was defined, which facilitates the representation of design processes and

method fragments through the use of standardized templates, thus supporting the creation of easily sharable repositories and facilitating the composition of new design processes. Following this standardization approach, this book gathers the documentations of some of the best-known agent-oriented design processes. After an introductory section, describing the goal of the book and the existing IEEE FIPA standard for design process documentation, thirteen processes (including the widely known OpenUP, the de facto standard in object-oriented software engineering) are documented by their original creators or other well-known scientists working in the field. As a result, this is the first work to adopt a standard, unified descriptive approach for documenting different processes, making it much easier to study the individual processes, to rigorously compare them, and to apply them in industrial projects. While there are a few books on the market describing the individual agent-oriented design processes. none of them presents all the processes, let alone in the same format. With this handbook, for the first time, researchers as well as professional software developers looking for an overview as well as for detailed and standardized descriptions of design processes will find a comprehensive presentation of the most important agent-oriented design processes, which will be an invaluable resource when developing solutions in various application areas.