



Object Databases: Introduction

Object Databases An Introduction

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Object Databases An Introduction:

Object Databases Barry Eaglestone,Mick Ridley,1998 This text uses the ODMG model making it applicable to users of many object database systems The material is presented in an accessible way avoiding mathematical notations and includes many realistic and familiar illustrations and examples **Introduction to Object-oriented Databases** Won Kim,1991

Fundamentals of Object Databases Suzanne Wagner Dietrich,Susan Urban,2011 This monograph presents the fundamentals of object databases with a specific focus on conceptual modeling of object database designs After an introduction to the fundamental concepts of object oriented data the monograph provides a review of object oriented conceptual modeling techniques using side by side Enhanced Entity Relationship diagrams and Unified Modeling Language conceptual class diagrams that feature class hierarchies with specialization constraints and object associations These object oriented conceptual models provide the basis for introducing case studies that illustrate the use of object features within the design of object oriented and object relational databases For the object oriented database perspective the Object Data Management Group data definition language provides a portable language independent specification of an object schema together with an SQL like object query language LINQ Language INtegrated Query is presented as a case study of an object query language together with its use in the db4o open source object oriented database For the object relational perspective the object relational features of the SQL standard are presented together with an accompanying case study of the object relational features of Oracle For completeness of coverage an appendix provides a mapping of object oriented conceptual designs to the relational model and its associated constraints P 4 of cover *Fundamentals of Object Databases* Suzanne Dietrich,Susan Urban,2010-12-29 Object oriented databases were originally developed as an alternative to relational database technology for the representation storage and access of non traditional data forms that were increasingly found in advanced applications of database technology After much debate regarding object oriented versus relational database technology object oriented extensions were eventually incorporated into relational technology to create object relational databases Both object oriented databases and object relational databases collectively known as object databases provide inherent support for object features such as object identity classes inheritance hierarchies and associations between classes using object references This monograph presents the fundamentals of object databases with a specific focus on conceptual modeling of object database designs After an introduction to the fundamental concepts of object oriented data the monograph provides a review of object oriented conceptual modeling techniques using side by side Enhanced Entity Relationship diagrams and Unified Modeling Language conceptual class diagrams that feature class hierarchies with specialization constraints and object associations These object oriented conceptual models provide the basis for introducing case studies that illustrate the use of object features within the design of object oriented and object relational databases For the object oriented database perspective the Object Data Management Group data definition language provides a portable

language independent specification of an object schema together with an SQL like object query language LINQ Language INtegrated Query is presented as a case study of an object query language together with its use in the db4o open source object oriented database For the object relational perspective the object relational features of the SQL standard are presented together with an accompanying case study of the object relational features of Oracle For completeness of coverage an appendix provides a mapping of object oriented conceptual designs to the relational model and its associated constraints

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An Introduction to Database Systems C. J. Date, 1986 An overview of database management An architecture for a database system The internal level An overview of DB2 Data definition Data manipulation The system catalog Views Embedded SQL An overview of INGRES Relational data structure Relational integrity rules Relational algebra Relational calculus Relational systems Query optimization Further normalization Recovery and concurrency Security and integrity The database product family An inverted list system DATACOM DB A hierachic system IMS A network system IDMS Distributed systems Semantic modeling List of acronyms Index

Objects and Databases Alan Dearle, Roberto V. Zicari, 2010-09-21 According to Francois Bancillon and Won Kim SIGMOD RECORD Vol 19 No 4 December 1990 object oriented databases started in around 1983. Seven years later this publication contains the proceedings of the Third International Conference on Object Oriented Databases ICOODB 2010. Two questions arise from this: why only the third and what is of interest in the field of object oriented databases in 2010. The first question is easy: in the 1980s and 1990s there were a number of conferences supporting the community: the International Workshops on Persistent Object Systems started by Malcolm Atkinson and Ron Morrison, the EDBT series and the International Workshop on Database Programming Languages. These database oriented conferences complimented other OO conferences including OOPSLA and ECOOP, but towards the end of the last century they dwindled in popularity and eventually died out. In 2008 the First International Conference on Object Databases was held in Berlin. In 2009 the second ICOODB conference was held at the ETH in Zurich as a scientific peer-reviewed conference. What is particular about ICOODB is that the conference series was established to address the needs of both industry and researchers who had an interest in object databases in innovative ways to bring objects and databases together and in alternatives extensions to relational databases. The first conference set the mould for those to follow: a combination of theory and practice with one day focusing on the theory of object databases and the second focusing on their practical use and implementation.

Succeeding with Object Databases Akmal B. Chaudhri, Roberto Zicari, 2001 Take a tour with leading researchers and developers for a practical look at object databases. Whether you currently work with or are thinking of moving to object databases, Chaudhri and Zicari provide a collection of real world case studies and examples that demonstrate how some of the world's leading companies and research institutions are leveraging Java, XML and Object Relational Systems to build robust databases. Starting with a comprehensive introduction to object and object relational

databases the book then offers detailed discussions on some of the latest topics in the field such as JDBC and SQLJ support in relational databases and database modeling using UML You ll also learn about object to relational mapping tools architectural issues that influence performance and the issues of complexity and scale How popular tools from Computer Associates eXcelon GemStone Objectivity Oracle Versant and Poet were used in the case studies is also discussed The companion Web site at www.wiley.com/compbooks/chaudhri includes links to object oriented database software applications and additional resources Visit our Web site at www.wiley.com/compbooks/chaudhri Visit the companion Web site at www.wiley.com/compbooks/chaudhri

[An Introduction to Object-oriented Databases and Database Systems](#) Michael L. Horowitz, Carnegie-Mellon University. Information Technology Center, 1991 Abstract Recent developments in editing applications especially in the areas of CAD CAM and multimedia have provoked interest in integrating the data abstraction capabilities of object oriented languages with the persistence and concurrency control of database systems Database systems assume the task of determining the file storage format for the application In addition such systems provide support for concurrency control atomicity of multiple updates recoverability authorization versioning and search i e associative access Sophisticated editing applications however require better data modeling capabilities than those normally provided by existing database systems i e those presenting a relational or network data model Thus an impedance mismatch exists between the way databases view application data and how the application wishes to manipulate that data A database system that supports an object oriented data model would eliminate this impedance mismatch and furnish the desired modeling capabilities object identity direct access data abstraction extensibility inheritance polymorphism genericity encapsulation embedded semantics and data type extensibility Integrating object oriented concepts and normal database concepts also presents the opportunity to explore new features that would help application builders object composition property propagation cyclic queries indexing extensibility relationship support database self containment and schema evolution This paper presents a summary of current database research into new data models based on object oriented concepts The concepts themselves are defined and then the different systems are described **[An Introduction to Database Systems, 8e](#)** Date, Kannan, 1998 **[An Introduction to Database Systems 8e](#)** **[An Introduction to Object-oriented Databases](#)** Earle W. Gustafson, 1993 [Learn Database Systems with Implementation and Examples](#) Imed Bouchrika, 2014 The main motivation behind writing this book is to teach the basic concepts of database systems through concrete and practical knowledge and examples without too many wordy and useless pages The book is made deliberately concise and short covering the main aspects of databases that you have to master and gain either for industrial or academic purposes The main chapters included within this book are Introduction to Databases Database Design SQL Structured Query Language SQL Structured Query Language SQL Transactions Procedures Triggers Object Relational Databases Databases Java Programming Solutions Answers The book website can be accessed at <http://www.LearnDB.com> **[Moving Objects Databases](#)**

Ralf Hartmut Güting, Markus Schneider, 2005-08-23 First uniform treatment of moving objects databases the technology that supports GPS and RFID data analysis **Object-oriented Databases** John G. Hughes, 1991 A comprehensive introduction to object oriented concepts as applied to databases and knowledge based systems The principles of semantic data modelling are described in depth and this is followed by a comprehensive description of the application of object oriented techniques in this area Separate chapters are devoted to implementation aspects such as persistence and concurrency **Database Theory and Application, Bio-Science and Bio-Technology** Yanchun Zhang, Alfredo Cuzzocrea, Jianhua Ma, Kyo-il Chung, Tughrul Arslan, Xiaofeng Song, 2010-11-25 Welcome to the proceedings of the 2010 International Conferences on Database Theory and Application DTA 2010 and Bio Science and Bio Technology BSBT 2010 two of the partnering events of the Second International Mega Conference on Future Generation Information Technology FGIT 2010 DTA and BSBT bring together researchers from academia and industry as well as practitioners to share ideas problems and solutions relating to the multifaceted aspects of databases data mining and biomedicine including their links to computational sciences mathematics and information technology In total 1 630 papers were submitted to FGIT 2010 from 30 countries which includes 175 papers submitted to DTA BSBT 2010 The submitted papers went through a rigorous reviewing process 395 of the 1 630 papers were accepted for FGIT 2010 while 40 papers were accepted for DTA BSBT 2010 Of the 40 papers 6 were selected for the special FGIT 2010 volume published by Springer in the LNCS series 31 papers are published in this volume and 3 papers were withdrawn due to technical reasons We would like to acknowledge the great effort of the DTA BSBT 2010 International Advisory Boards and members of the International Program Committees as well as all the organizations and individuals who supported the idea of publishing this volume of proceedings including SERSC and Springer Also the success of these two conferences would not have been possible without the huge support from our sponsors and the work of the Chairs and Organizing Committee **Object Databases** Mary E. S. Loomis, 1994 This volume conveys the important facts and concepts business professionals need in order to understand the role of object databases in today's rapidly evolving computing environments Covering all aspects of the essentials of object database technology without requiring advanced technical knowledge this book makes an excellent introductory reference for database experts and non experts alike **An Introduction to Database Systems** Bipin C. Desai, 1990 **Object-oriented Databases** Ez Nahouraii, Fred Petry, 1991 This reprint collection consists of articles on object oriented databases and provides a broad overview of current concepts examples and applications The volume contains an introduction to the subject and papers organized into four sections basic concepts applications design and implementation **Euro-Par 2001 Parallel Processing** Rizos Sakellariou, John Keane, John Gurd, Len Freeman, 2003-06-30 Euro Par the European Conference on Parallel Computing is an international conference series dedicated to the promotion and advancement of all aspects of parallel computing The major themes can be divided into the broad categories of hardware software algorithms and applications for parallel computing The objective of Euro Par is to

provide a forum within which to promote the development of parallel computing both as an industrial technique and an academic discipline extending the frontiers of both the state of the art and the state of the practice. This is particularly important at a time when parallel computing is undergoing strong and sustained development and experiencing real industrial trial take up. The main audience for and participants in Euro Par are seen as researchers in academic departments, government laboratories and industrial organisations. Euro Par aims to become the primary choice of such professionals for the presentation of new results in their specific areas. Euro Par is also interested in applications that demonstrate the effectiveness of the main Euro Par themes. Euro Par has its own Internet domain with a permanent web site where the history of the conference series is described <http://www.euro-par.org>. The Euro Par conference series is sponsored by the Association of Computer Machinery and the International Federation of Information Processing. Euro Par 2001 Euro Par 2001 was organised by the University of Manchester and UMIST.

Object-oriented Databases Dimitris N. Chorafas, Heinrich Steinmann, 1993

This book is for leading edge technologists and executives responsible for data processing, office automation and computer integrated manufacturing. It discusses the concepts that underpin object oriented approaches and presents a complete range of implementation possibilities. Emphasizes object oriented database products and covers ONTOS one of the commercially available DBMS.

Object databases, 1995

The Enigmatic Realm of **Object Databases An Introduction**: Unleashing the Language is Inner Magic

In a fast-paced digital era where connections and knowledge intertwine, the enigmatic realm of language reveals its inherent magic. Its capacity to stir emotions, ignite contemplation, and catalyze profound transformations is nothing lacking extraordinary. Within the captivating pages of **Object Databases An Introduction** a literary masterpiece penned by a renowned author, readers attempt a transformative journey, unlocking the secrets and untapped potential embedded within each word. In this evaluation, we shall explore the book's core themes, assess its distinct writing style, and delve into its lasting impact on the hearts and minds of those who partake in its reading experience.

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