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Titolo	Principles of Distributed Database Systems [[electronic resource] /] / by M. Tamer Özsu, Patrick Valduriez
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Soggetti	Computers Computer communication systems Management information systems Information Systems and Communication Service Computer Communication Networks Business Information Systems
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Introduction -- 2 Distributed and Parallel Database Design -- 3 Distributed Data Control -- 4 Distributed Query Processing -- 5 Distributed Transaction Processing -- 6 Data Replication -- 7 Database Integration -- Multidatabase Systems -- 8 Parallel Database Systems -- 9 Peer-to-Peer Data Management -- 10 Big Data Processing -- 11 NoSQL, NewSQL and Polystores -- 12 Web Data Management -- Appendices -- A Overview of Relational DBMS -- B Centralized Query Processing -- C Transaction Processing Fundamentals -- D Review of Computer Networks -- References -- Index.
Sommario/riassunto	The fourth edition of this classic textbook provides major updates. This edition has completely new chapters on Big Data Platforms (distributed storage systems, MapReduce, Spark, data stream processing, graph analytics) and on NoSQL, NewSQL and polystore systems. It also includes an updated web data management chapter that includes RDF and semantic web discussion, an integrated database integration chapter focusing both on schema integration and querying over these systems. The peer-to-peer computing chapter has been updated with a

discussion of blockchains. The chapters that describe classical distributed and parallel database technology have all been updated. The new edition covers the breadth and depth of the field from a modern viewpoint. Graduate students, as well as senior undergraduate students studying computer science and other related fields will use this book as a primary textbook. Researchers working in computer science will also find this textbook useful. This textbook has a companion web site that includes background information on relational database fundamentals, query processing, transaction management, and computer networks for those who might need this background. The web site also includes all the figures and presentation slides as well as solutions to exercises (restricted to instructors).

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