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Sommario/riassunto

Unique coverage of traditional database theory and current research for building easier-to-manage distributed database systems. A distributed database management system (DDBMS) is a layer of software, implemented on top of existing database management systems, allowing users transparent access to information dispersed across a network. This book addresses the architectural and platform issues on the design and development of a DDBMS, guiding readers in building their own systems in real-world environments. Distributed Database Management Systems is divided into three units. The first provides a theoretical foundation for understanding the internal processing of the DDBMS available to address these issues. The second unit presents the "state of the practice," examining the architectural alternatives that practitioners will likely encounter in the real world and the exploring the general requirements for any platform capable of implementing a DDBMS architectural alternative-including those yet to be invented. The final unit focuses on distributed database implementation, examining three platforms suitable for the development of a real DDBMS system-the Java Message Service (JMS), the Java 2 Enterprise Edition (J2EE), and the Microsoft .NET Framework. For each, a "starter kit" is provided (containing a detailed overview and an extensible framework) and discussed in detail.
