Object-Oriented Database Systems

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Object-Oriented Database Management Systems (OODBMS) come as an answer to new database application domains (OIS, CASE, CAD/CAM, AI, etc.) in terms of rich data types, efficient support for complex objects, and computing power. By blending object-oriented programming and database technologies, OODBMSs try to gain their respective advantages: encapsulation, modelling power, extensibility, persistence, transactions, high-level queries and optimization. This tutorial gives a thorough grounding in the OODBMS technology, the products and the industry direction. It provides both an overview of the fundamental concepts and a discussion of the implementation issues.

The topics that are covered include the following:

- Fundamental OODBMS concepts
- Object data models and languages
- Client server architectures
- Object management
- Transaction management
- Query processing
- Approaches to building an OODBMS