



ORDB - Object–relational database

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What is it?

(In a nutshell)

- Database management system
- Combines advantages of relational DB and object-oriented DB
- Relational database functions
 - Mandatory!
- Functions of object-orientated database model
 - Not mandatory!
- DB type to bridge the gap between RDB and object-oriented modeling techniques



Combination of ...

(In a nutshell)

Advantages of RDB

- Data stored in traditional database
- Manipulated and accessed using SQL queries

Advantages of ODB

- Supports extension of the data model with custom data types and methods
- Database is considered an object store
- objects, classes and inheritance are directly supported in database schemas and in the query language



Advantages?

- Inheritance
- Complex data types
- Extensibility

Disadvantages?

- Complicated and difficult to handle



Examples

Difference between ORDB and RDB

<i>Titel</i>	<i>Autoren</i>	<i>Datum</i>	<i>Stichwortliste</i>
Reich und Schön	{Crawford, Schiffer}	12, Februar, 2000	{schminken, lächeln}
Dick und Doof	{Laurel, Hardy}	1, April, 1930	{boing, peng}

<i>Titel</i>	<i>Autoren</i>	<i>Tag</i>	<i>Monat</i>	<i>Jahr</i>	<i>Stichworte</i>
Reich und Schön	Crawford	12	Februar	2000	schminken
Reich und Schön	Crawford	12	Februar	2000	lächeln
Reich und Schön	Schiffer	12	Februar	2000	schminken
Reich und Schön	Schiffer	12	Februar	2000	lächeln
Dick und Doof	Laurel	1	April	1930	boing
Dick und Doof	Laurel	1	April	1930	peng
Dick und Doof	Hardy	1	April	1930	boing
Dick und Doof	Hardy	1	April	1930	peng



Where is it used?

Areas of application are systems for recording geographic data (GIS) in which coordinates are linked to one another.

